

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1065—VOL. XXVI.]

London, Saturday, January 19, 1856.

STAMPED SIXPENCE.
UNSTAMPED... FIVEPENCE.

MR. JAMES CROFTS, MINING BROKER,
No. 1, FINCH LANE, CORNHILL, LONDON, TRANSACTS BUSINESS,
both in BUYING and SELLING, for immediate cash.

DIVIDEND MINES, well selected, are the best of any known investments—paying from 15 to 20 percent. per annum in dividends. The choice of NON-DIVIDEND MINES for speculation requires careful discrimination.

Mr. Crofts is a BUYER or SELLER of the following:—Alfred Consols, Bedford United, South Tamar, Wh. Wrey, Sortridge Consols, Ivybridge, North Bassett, West Bassett, Trewetha, Wheal Hender, Rosewarne, Wheal Edward, San Fernando, West Providence, North Buller, Wheal Kitty (St. Agnes), Tincroft, Wheal Uny, Ludecott, Trewetha, Clijah and Wentworth, Mill Pool, Port Bowen, Lelant Consols, Wh. (Lelant), Gavton United, East Gunnis Lake, Keswick, Trevethan, Stray Park.

MR. JAMES LANE, No. 29, THREADNEEDLE STREET, is a BUYER of Sheba, South Garraway, West Providence, Devon Buller, Lelant, Wh. (Lelant), Trewetha, Sortridge, Ludecott, &c.; and is prepared to DEAL in most of the shares named in the general List.—Jan. 18, 1856.

MR. JAMES B. BRENCHEY, No. 2, PINNER'S COURT, OLD BROAD STREET, DEALER in BRITISH and FOREIGN MINING SHARES. SALES and PURCHASES EFFECTED in BANK, RAILWAY, and INSURANCE SECURITIES.

NOTICE OF REMOVAL.—Mr. PETER WATSON has REMOVED from 37, Old Broad street to 57, THREADNEEDLE STREET, close to the Stock Exchange.

DIVIDEND MINES, well selected, are the BEST of any known INVESTMENT, and which are now paying from 20 to 30 percent. per annum (in dividends every two or three months). NON-DIVIDEND MINES require a judicious selection also, and careful discrimination; this particular stock frequently advances FIVE HUNDRED per cent. and upwards.

Mr. PETER WATSON, SHARE DEALER, AND GENERAL COMMISSION AGENT, from the 11 years' experience he has had in every department of mining, and in the management of mines, and an extensive connection with mine agents and others in Cornwall and Devon, enables him to judge of and select mines of intrinsic value. Mr. PETER WATSON, being a Member of the Mining Exchange, will forward a list of prices when required.

57, Threadneedle-street, London, Jan. 18, 1856.

MR. LELEAN, 4, CUSHION COURT, OLD BROAD STREET, LONDON.—BUSINESS TRANSACTED in every description of BRITISH STOCKS, FUNDS, and SECURITIES; also, BRITISH and FOREIGN MINES.

MINE SHARES FOR SALE.—50 Bassett United, £23; 25 St. Austell Consols, 25s.; 5 Alfred Consols, £17; 10 Bryntall, £7; 10 Bedford United, £10 1/2; 10 Boddinck, £240; 5 Bolling Well, £18; 6 Bell and Lanarth, £6 1/2; 20 Beeston, 12s. 6d.; 10 East Garraway, 25s.; 30 East Trelawny, 2s.; 2 East Rose, £7 2s; 2 Eaglebrook, £16; 10 Devon Wh. Buller, £34; 10 Devon Burr, £11; 10 Devon Great Consols, £400; 50 Fort Bowen, 3s. 9d.; 5 Great Alfred, £15; 5 Great Wheal Fortune, £9; 100 Great Sortridge, 3s.; 100 Great Vor, £4 1/2; 20 Great Sheba, £9 1/2; 50 Hawkmoor, 12s. 6d.; 20 Lady Bertha, 2s.; 5 Mill Pool, £4 1/2; 100 Molland, 1s. 6d.; 5 North Bassett, £4 1/2; 10 North Buller, £7; 100 North Wheal Wrey, 6s.; 10 Wheal Surprise, 8s.; 24 Wheal Consols, 5s.; 32 Ivy Tor, £1; 2 South Crinnis, £325; 25 Swanpool, 30s.; 2 South Garraway, £125; 100 West Sortridge, 5s. 6d.; 250 Great Wheal, 2s. 6d.; 1 Wheal Buller, £620; 1 East Darren, £24; 1 United Mines, £250; 1 Cefn Cwm Brynwy, £24 1/2; 1 South Frances, £375; 1 Grambler and St. Aubyn, £117 1/2; 2 Gilmar, 45s.; 5 Sortridge Consols, £4 1/2; 20 Pendine, £1 1/2; 10 Speare Consols, 35s.; 20 Portkellion United; 10 West Crinnis, £24 1/2; 20 Wheal Gaskins, 15s.; 5 West Bassett, £38; 1 Wh. Bassett, £410; 100 Pennance Consols, 8s.; and 50 Gavton United, 28s.

Mr. LELEAN will BUY 30 West Par, 10s.; 50 Alten, £24 1/2; 2 Rosewarne United, £117 1/2; and 80 East Vor, 5s.

Mr. LELEAN particularly desires that the number and price of shares may be inserted in the orders for the purchase and sale; and that such orders are sent on Tuesday, to ensure their insertion in his list the Saturday following.

Mr. LELEAN, Mine Share Dealer.

4, CUSHION COURT, OLD BROAD STREET, Jan. 18, 1856.

MINING SHARES.—**S**HARES WANTED.—
Carnorth. East Wheal Rose. Fort Bowen.
Cargill. Speare Consols. Linaries.
East Wheal Margaret. West Alfred.
Eaglebrook. Levant.
Great Wheal Vor. Boscan.
Vale of Towy. Kitty (St. Agnes).
East Bassett. Wheal Uny.
West Polberro. Pend-an-drea.
North Frances. Wheal Wrey.
Wheat Bal. Craddock Moor.

Apply, stating price and number for sale, to Mr. GEO. SPRATLEY, 2, Winchester-buildings, London.

FLETCHER AND CO., RAILWAY, MINING, INSURANCE, AND GENERAL SHAREBROKERS, 163, WOODHOUSE LANE, LEEDS. Gold Mining Shares wanted.

FOURTH EDITION.

BRITISH MINES CONSIDERED AS A MEANS OF INVESTMENT. By J. H. MURCHISON, F.G.S., F.S.S., &c.

FOURTH EDITION, with an APPENDIX, giving a REVIEW of the PROGRESS of BRITISH MINES, and the dividends paid, during the year 1855, with their PRESENT POSITION and PROSPECTS, &c. This edition contains full particulars of the principal Dividend and Progressive Mines in this country.

Copies may be obtained at Mr. MURCHISON's offices, 117, Bishopton-street Within; or at the Mining Journal office, 26, Fleet-street, London.

OPINIONS OF THE PRESS ON THE PREVIOUS EDITIONS.

A very useful publication, and calculated to considerably improve the position of Home mine investment.—Mining Journal, Dec. 2.

This is a valuable guide to investors in mines.—Herapath's Journal, Dec. 2.

Mr. Murchison takes sound views upon the important subject of his book, and has placed, for a small sum, within the reach of all persons contemplating making investments in mining shares that information which should prevent rash speculation and unproductive outlay of capital in mines.—Morning Herald, City Article, March 21, 1855.

The whole comprises a great deal of very useful information, of special interest to persons having capital employed, or who may be desirous of investing in mines.—Morning Chronicle, City Article, March 25, 1855.

Mr. Murchison has here brought together the details most wanted on the legitimate mining undertakings at home.—Globe, City Article, Dec. 7.

The book will be found extremely valuable as a guide to all who are interested, or about to seek investments in mines; and we have elsewhere availed ourselves of some of the mining curiosities which Mr. Murchison has so skillfully brought together.—Observer, Dec. 24, 1854.

Will be exceedingly valuable to any one who desires to adventure in this important branch of our home industry, &c. &c. and comprises all that is necessary to guide a person in a judicious outlay of his capital.—Plymouth Journal, Dec. 7.

The matter appears to us to be treated with much ability, and those who have any interest in mining, or who are desirous of investing capital in mines, should avail themselves of the information which the writer has so clearly brought together.—Plymouth Herald.

The author of this little work has evidently devoted considerable attention to the subject on which it treats, and has succeeded in producing a volume replete with information valuable to those interested in mining speculations.—Bristol Mirror.

Those who are seeking information on mines and mining operations, with regard to money investment, will find all the instruction and guidance they need in these pages.—Dover Chronicle.

This is a very valuable book, which all who are interested in mining ought to possess. It is calculated, we think, to give an impulse to legitimate mining adventures, and to prudent enterprise.—Cornwall Gazette.

A very valuable work to those engaged in mining matters; it contains a great amount of important information, not to be had, in an equally clear, condensed, and comprehensive form, in any other publication.—Morning Advertiser, City Article.

The work is indispensable to those persons who have any interest in mining.—Derbyshire Courier.

This is a clear, succinct, statistical, historical, and geological description of the leading mines in Great Britain, with an especial view to their eligibility as investments. The author has taken particular care to discriminate between those mines which are sound and legitimate, and those which are simply speculative in their character. He has treated the subject with great ability.—Blackburn Standard.

It is a complete directory of mining enterprise, and ought to be read with scrupulous care by those who have sums of money for investment.—Nottingham Journal.

To capitalists and those interested in this kind of property, the work will prove very serviceable.—Birmingham Mercury.

Mr. Murchison has treated the subject with great ability, and investors will find it a valuable guide.—Welshman.

Mr. Murchison has produced a most admirable compendium—both of progressive mines and dividend mines—full of information, and likely to be most useful to those who are interested in those speculations.—Waterford Mail.

A little manual of a practical character, by one who has had great experience in the management of British mines, calculated to be of value to speculators.—Bath Journal.

The book is cheap, and we have no hesitation in saying that it will be found highly useful to all connected with mining operations.—Ulverston Advertiser.

In the Mining Journal of July 7, 1855, these reviews will be seen at greater length, with others from the *Dorset County Chronicle*, *Glasgow Examiner*, *N. Wales Chronicle*, *Wrexham Guardian*, *Derby Advertiser*, *Belfast News Letter*, &c.

GEORGE MOORE is prepared to do BUSINESS, at the closest prices, in any part of—

10 Arthur. 5 Great Wheal Alfred. 1 South Bassett.
10 Alfred Consols. 10 Hender. 10 South Condurrow.
3 Boiling Well. 50 Ivybridge. 50 Tamar Consols.
3 Bedford United. 50 Lady Bertha. 20 Trebene.
20 Buller and Bassett Unit. 1000 Molland. 150 Tincroft.
500 Cwm Darren. 5 North Bassett. 5 Trefusis.
5 Clijah and Wentworth. 5 North Crofty. 100 West Grenville.
2 Carvannal. 500 Nanteos and Penrhiew. 5 West Bassett.
2 Collacombe. 1 Rosewarne. 1 West Seton.
1 East Wheal Rose. 50 South Tamar. 100 Wheal Zion.
1 East Bassett. 20 Sortridge Consols. 50 Wheal Grenville.
5 East Buller. 17 South Carr Consols. 20 Wheal Edward.
20 Devon Buller. 1000 St. Day United. 1 Wheal Buller.

GEORGE MOORE will be happy to advise with any capitalist who may be desirous of purchasing British Mining Stock, either for a permanent investment, or for an advanced in price.

Business transacted in every description of British and Foreign Mines; and the closest prices forwarded on application.

GEORGE MOORE, Dealer in Mining Shares, 1, Crown-court, Threadneedle-street.

MR. JOSEPH JAMES REYNOLDS, STOCK AND SHARE BROKER, No. 21, THREADNEEDLE STREET, LONDON.

Mr. REYNOLDS continues to TRANSACT BUSINESS in BRITISH and FOREIGN STOCKS, FUNDS, and SECURITIES, BRITISH and FOREIGN RAILWAY SHARES, DEBENTURES, &c. Also, in ENGLISH, IRISH, SCOTCH, and FOREIGN MINING SHARES.

MESSRS. POWELL AND COOKE, DEALERS IN MINING SHARES, No. 8, HERCULES CHAMBERS, OLD BROAD STREET, LONDON.—The above continue to DEAL in the SHARES of all the leading DIVIDEND and good PROGRESSIVE MINES.—Jan. 18, 1856.

MR. W. LEMON OLIVER, STOCK AND SHAREBROKER, 4, AUSTINFIARS, CITY.

BUSINESS TRANSACTED in HOME and FOREIGN RAILWAYS, FUNDS, SECURITIES, BRITISH and FOREIGN MINES, &c.

MR. E. GOMPERS, No. 98, GRACECHURCH STREET, has BUSINESS to TRANSACT in most of the leading DIVIDEND and PROGRESSIVE MINES. Also, in Life, Fire, Maritime Insurance, Steam Navigation, various Gas Companies, and various Joint-Stock Companies' Shares, returning regular dividends.

MR. R. E. EMERSON, SHARE DEALER, 3, COPTHALL BUILDINGS, THROGMORTON STREET, LONDON.

BUSINESS TRANSACTED in DIVIDEND and PROGRESSIVE MINES, BRITISH and FOREIGN RAILWAYS, and every other description of STOCK.

MRS. MICHELL, COMMISSION AGENT and DEALER in BRITISH MINES, is always in a position to BUY or SELL in most DIVIDEND MINES, as well as NON-DIVIDEND MINES, where the prospects are such as will lead to early dividends. Gratuitous advice given on personal application, or by letter.—2, Crown-court, Threadneedle-street, London, Jan. 18, 1856.

MESSRS. C. H. J. GEDDES, W. BURGAN, AND CO., have OPENED AN OFFICE at No. 60, GRACECHURCH STREET, for the purpose of BUYING and SELLING SHARES in the following MINES:—
Hawkmoor. Gwntown.
Swanpool. Perran Wheal Mary Ann.
100 Lady Bertha. Wheal Kitty (St. Agnes).
50 Carew United.

MESSRS. C. H. J. GEDDES, W. BURGAN, AND CO., MINING AGENTS, beg to inform their friends and the public that they are DEALERS in MINING SHARES, both DIVIDEND-PAYING and PROGRESSIVE, and in all PROPERTIES relating to MINES; and they offer gratuitously information relating to such properties, which Mr. BURGAN, from his practical knowledge, extensive connections, and long residence in Cornwall, is fully competent to supply. They also TRANSACT BUSINESS in GOVERNMENT SECURITIES, at regular charges, and in all JOINT-STOCK COMPANIES and OTHER SHARES.

MR. HY. SIBLEY, STOCK, SHARE, AND MINING AGENT, 4, BIRCHIN LANE, CORNTHILL.

MR. T. TYACK, MINE SHAREBROKER, AUCTIONEER, &c., CAMBORNE, CORNWALL.

MR. WM. SIMS, MINING SHAREBROKER AND GENERAL COMMISSION AGENT, REDRUTH, CORNWALL.

MR. M. W. BAWDEN, MINE BROKER, GENERAL ASSAYER, AND COMMISSION AGENT, LISKEARD, CORNWALL.

MR. R. W. JENKIN, GENERAL ASSAYER, CALLINGTON.

MRS. RICHARD MICHELL'S MINING, AUCTION, AND GENERAL COMMISSION AGENCY OFFICES, FOYLE STREET, REDRUTH.

Mines inspected, and information punctually furnished.

MR. W. H. BRUMBY, STOCK AND SHAREBROKER, 1, QUIET STREET, BATH.

BUSINESS TRANSACTED in every class of MINING PROPERTY.

WANTED.—West Polberro, Bryntall, Alfred Consols, Boscan, Wheal Zion, and Grambler and St. Aubyn.

THOMAS EDINGTON, PURCHASER AND INSPECTOR OF CASTINGS ON COMMISSION, 17, GORDON STREET, GLASGOW.

MR. ADAM MURRAY, CONSULTING MINING ENGINEER, 76, CORNTHILL, LONDON.

MINING OFFICES, UNY LELANT, HAYLE, CORNWALL.—
Mr. THOMAS TREWEKE begs to inform his friends and the mining public generally, that he has COMMENCED BUSINESS at the above address as a SHARE-DEALER and GENERAL COMMISSION AGENT; and trusts by strict attention to the interests of those who may favour him with their orders to merit a share of their patronage. Mr. TREWEKE flatters himself that being in daily communication with the best mining authorities of the day, and having had very considerable experience in practical mining, he is in a position to offer more than ordinary advice as to what mines in which one should invest, or otherwise.—Uny Lelant, Jan. 18, 1856.

MR. B. LAMBERT TENDERS HIS SERVICES TO PARTIES INVESTING IN or-SELLING MINING PROPERTY. By the soundness of the information to which he directs attention, his constant endeavours are to secure the support of his clients; and any information relating to mining shares will at all times be afforded, either to parties now holding shares, or to those who may be desirous of investing. OFFICIAL PRICES forwarded daily on request; and a WEEKLY GENERAL LIST OF PRICES in SELECTED MINES, with a Commentary on the State of the Mining Share Market, published every Wednesday, in time for the evening mails, will be forwarded, post free, on application.

Mr. LAMBERT is well acquainted with the markets for the following shares, in which he can always transact business at the closest prices of the day:—

DIVIDEND MINES.
Bedford United. Marke Valley. Tincroft. West Providence.
Mary Ann. Trebene. West Seton.
Condurrow. Nanicos & Porthiwall. Trelawny. Wheal Arthur.
Devon Great Consols. North Bassett. Trewetha. Wheal Bassett.
East Wh. Margaret. Rosewarne. United Mines. Wheal Buller.
Exmouth and Adams. South Cadron. Wheal of Towy. Wheal Clifford.
Great Wheal Vor. South Frances. West Bassett. Wheal Kitty (Lelant).
Hington Down. South Tamar. West Cadron. Wheal Wrey.
Lisburne. Tamar Consols. Wheal Charlotte. West Damsel.

PROGRESSIVE MINES.
Bell and Lanarth. East Tamar. North Towy. Trebavah.
Bryatall. East Wheal Rose. North Wheal Robert. Trenow Consols.
Callington. Gerrig. Gilmar. North Wh. Trelawny. West Alfred.
Camborne Consols. Gossamer. Osred. West Par Consols.
Carvannal. Grambs. & St. Aubyn. Osred. West Sortridge.
Clijah & Wentworth. Great Sortridge. Great Wh. Alfred. West Stray Park.
Comford. Great Wh. Baddern. South Bedford. West Cupid.
Coppice Hill. Great Wh. Baddern. South Cadron. Wheal Grenville.
Cradock Moor. Merlin. South Curn. Brea. Wheal Hender.
Devon Wh. Buller. Mill Pool. South Devon. Wheal Kitty (St. Agn.).
Eaglebrook. North Buller. South Garraway. Wheal Lindcott.
East Bassett. North Crofty. South Providence. Wheal Russell.
East Fronzoch. North Frances. St. Day United. Wheal Trefusis.
East Russell. North Rosewarne. Stray Park. Wheal Tehidy.
North Rosewarne. Tavy Consols. Wheal Zion.

VALUABLE DIVIDEND AND OTHER MINING SHARES FOR SALE.

30 Great Sheba

Original Correspondence.

THE CORNISH STEAM-ENGINE, AND ITS HORSE-POWER.

SIR.—Before entering into an explanation of the technical expressions used in the Table published in your Journal of Dec. 22, as desired by "An Engineer," and other of your readers, it may not be amiss to describe the principles and characteristics of the Cornish engine, since it will enable those not thoroughly conversant with them to understand the order and elementary relations of the Table.

The peculiarity of the Cornish engine consists in its having a reciprocating action depending upon a trigger, or detent movement. Hence it may be considered to be constituted of two parts, having differential but dependent relations. The controlling part is a mechanical appliance connected with the valve-gearing, called the "cataract," which acts so as to alter at will the working speed of the engine. The engines are usually "single-acting"—that is to say, the steam from the boiler acts only on one side of the piston, whilst its other side is open to the condenser. With the admission of steam, the motion of the piston commences, and at the same time lifts a considerable counterpoise depending from the opposite end of the main beam, known as the pump-rods. After the steam has been admitted through the requisite space, the admission or steam-valve is shut, and the movement of the piston is continued to the termination of the stroke by the impetus communicated to it at the commencement of its course, and by the expansion of the steam. It will be apparent, therefore, that from the period of shutting off the steam, the velocity of the piston to the end of its course will decrease, whilst the resistance remains the same.

At the end of the stroke, the outlet or ejection-valve closes, and the equilibrium, or valve opening a communication between the top and bottom of the cylinder, opens, allowing thereby the steam above the piston to expand on its underside, establishing an equilibrium between the two faces of the piston. At this moment, the pump-rod or counterpoise begins to descend, and operates to bring the piston to the top of the cylinder, and at the same time to produce the useful effect. When the piston is nearly raised to the top of the cylinder, the equilibrium or middle valve shuts, and the steam intercepted at the top of the piston is compressed more and more, until the engine is brought to a state of rest. Then the steam and outlet valves are again opened by the independent action of the cataract, and motion is in this manner continued.

The steam usually employed has a high density, ranging from 30 to 70 lbs. per inch in the boiler, and is cut off in the cylinder at from one-sixth to one-half the length of the stroke.

As the action of the Cornish engine is peculiar to itself, so also are the terms employed to express its effects. The diameter of the cylinder conveys to the engineer and miner an expression of its power; but its real effective work is always determined by the quantity of fuel consumed, and the work performed in a given time. This is denominated *duty*—a term used to denote the number of pounds raised 1 foot by the consumption of 1 bushel (94 lbs.) of coal. It may be formulated as force multiplied by the space through which it acts, divided by the number of bushels of coal consumed, ($\frac{F \times S}{C}$)—or, in arithmetical expression, reduce the load of the engine to pounds, which multiply by the number of strokes made, and this product by the length of the stroke in feet; then divide by the number of bushels of coal consumed, and the quotient is the *duty*.

By constantly watching the duty performed by individual engines, and the desire to increase it, the Cornish engineers have been continually excited to zealous emulation with each other, hence the engines in operation may be said to differ in their proportions, and in the arrangement of their details, according to the particular views of the designer. Long and short strokes have each their advocates, and this, with other alterations, necessitated by circumstances, alters the density of steam employed, as well as the ratio of expansion. To prescribe, therefore, the horse-power of such engines without knowing the precise elements, must be regarded only as a very useful approximation, yet of equal importance and value with the arbitrary rule employed to arrive at the horse-power of manufacturing or other engines of a general character.

The terms used in the table may now be explained:—

a. *Initial pressure* is the full pressure of steam per square inch, acting on the piston previous to the closing of the steam valve.

b. *Full pressure of steam one-fourth of stroke*, implies that when the piston has progressed through one-quarter of the length of its stroke, the steam-valve closes, leaving the remaining portion of the stroke to be performed by the impetus which the piston has acquired, and by the expansion of the steam.

c. *Mean pressure of steam* expresses the average pressure of steam throughout the stroke, and may be found by considering the full pressure part as 1, or the unit of the ratio of expansion, and adding to it the hyperbolic logarithm of the ratio. This sum multiplied by the pressure, and divided by the ratio of expansion, will give the mean pressure throughout the stroke. Thus, $1 + 1.386$ (hyp. log.) $- 2.386 \times 30 = 71.580$ $\frac{1}{4}$ = 17.8 lbs. mean pressure.

Note.—The reduction of one-fifth from the mean pressure is an allowance for the power absorbed (viz., friction) in effecting the movement of the whole machine, and which deduction is made from the mean pressure to establish an elementary number, so as to avoid the deduction of one-fifth in each calculation.

d. *Load in pounds*, signifies the pressure, power, or force of steam on the piston, less the allowance for friction, to overcome an equal resistance opposed to it; or, in other words, the weight of water lifted, plus friction, is considered to be equal to the power exerted on the piston.

e. *Economical working*, is intended to express the number of strokes per minute at which the engine may be driven to maintain the maximum effect or duty resulting from slow combustion, and effective condensation.

f. *Safe working*, is considered to be the limit of speed at which the engine may be driven, without suffering undue wear and tear.

g. The effective horse-power per stroke is given that the inquirer may ascertain the power due to the engine, from working a greater or less number of strokes per minute.

The average *duty*, or number of pounds lifted 1 foot high by the consumption of one bushel of coal, has increased from 5,500,000 lbs. in Smeaton's (atmospheric) engine, working in 1769, to about 60,000,000 realised from the Cornish engines at the present time. But the best engines are known to have raised 100,000,000 lbs. 1 foot, showing that a series of improvements has enabled the engineer to extract nearly the same amount of power from one bushel of coal as was originally done from 18 bushels. This great augmentation of economical result is due to the employment of Trevithick's boilers, the management of the fire-place, heating the water by the waste gases previous to its entering the boiler, using high-pressure steam (say) ranging from 25 to 60 lbs. per inch, and expanding it from $5\frac{1}{2}$ to $\frac{1}{2}$ of the stroke, in covering and clothing the valve chests, employing steam jacket around the cylinder, and in effecting complete condensation.—J. DARLINGTON.

THE STEAM-ENGINE, AND CORNISH ENGINEERS.

SIR.—I believe it is generally known that the Cornish steam-engines are more economical in the use of that powerful and highly useful agent, steam, than any other engines hitherto invented, and I think this is in a great measure proved by the great demand for them throughout Great Britain, and for exportation; but I do not consider that this has been attained by any superior genius inherent in the Cornish engineer more than those in other parts of the country, but simply from competition, dearth of fuel, occasional poverty of the mines, &c.

I think I may date the commencement of the competition from the beginning of the monthly reports of the duty performed by the consumption of a given quantity of fuel, which, however imperfect, have proved to be of very considerable advantage to the mining interest of this country, and to the general improvement of the steam-engine. The commencement of these reports was in 1814, and in less than 14 years from that time the consumption of coal, to do the same amount of work, was lessened more than one-half, and at a saving to the mines of 1,000,000.

Since 1828 the improvements have not been of much importance, inasmuch as regards the consumption of fuel; in fact, I almost begin to think that the changes are all wrong, and, therefore, in the absence of some new motive-power, we must content ourselves with what is accomplished, at least so far as regards the principle of the steam-engine. The improvements from 1814 to 1828 may be enumerated as follows:—Working with a much greater extent; the use of Trevithick's boilers, improved modes of construction, and better arrangement of engines and pumpwork; great improvements in the manufacture, and greater care in fixing and clothing the cylinders, pipes, &c., to prevent radiation of heat.

Previous to the year 1814 the greater part of the engines were as left by Mr. Watt and his agent, Mr. Murdoch—viz., working with steam about 10 lbs. pressure in the boilers, and, of course, using but very little expansion; and they were also badly manufactured, and badly erected, and very little attention paid to the clothing system. About this time Mr. Woolf came into the county, and immediately introduced the use of high steam, the benefit of which was soon apparent in the use of the single-

acting engines working expansively, and aided by Trevithick's boilers. Several modifications of the steam-engine were invented and carried out by various engineers, each one, of course, attempting to get the best engine on the high steam principle. Amongst them was Trevithick, who, strange to say, thought the condenser and air-pump might be dispensed with, and that greater economy of fuel might be effected by the use of a long stroke, high-pressure, non-condensing engine, working expansively. This was in use only a short time, because, although tried on the best principle of high-pressure steam, and with the cylindrical boilers, the consumption of fuel was just double that of the single-power condensing-engine, doing the same amount of work. That this difference, or thereabouts, must occur between these two engines, any one who knows the steam-engine must at once see, because in the condensing engine, if making what we term a good vacuum, there is no obstruction to the steam in making the stroke; whereas in the high-pressure non-condensing engine the steam has to contend against the whole pressure of the atmosphere, and if we call this only 10 lbs. on the square inch of piston, after deducting for friction, and drawing off condensing water, it is very clear that the condensing-engine will do an amount of work equal to 10 lbs. per square inch more than a similar size non-condensing engine, with the same consumption of fuel.

I would remark that, although the principle of the steam-engine may not admit of further improvement to any very great extent, changes in the arrangement or modification of the machinery may render this important machine more economical. An improvement in metallic pistons has lately been patented by Mr. William Brunton, engineer, of Camborne, which will, I think, be found of considerable importance. I have under my superintendence one of them at work in a 32-in. cylinder rotary-engine, and to my perfect satisfaction; the arrangement is exceedingly good, and the piston can be tightened in a few minutes, without lifting the cylinder cover. It has been at work four months only, therefore I can say nothing of its durability. Probably at the end of 12 months it may be examined, when its merits may be more fully developed.

The great advantages of this invention in our first-class engines, where the cylinder covers are some 2 or 3 tons or more to lift, and where there is a considerable flow of water into the mine, or what we term "quick water," will easily be seen, as instead of occupying some four or five hours to pack the piston, and at considerable expense in labour and material, one man can tighten the piston when required in 10 minutes, and without any assistance. There is another matter which I have suggested to some of my friends which appears would be an improvement of some importance; it is as follows:—From the commencement of the use of high steam in Cornwall, or about that time, the maximum load of our pumping-engines has been fixed at 15 lbs. per square inch of piston for large engines, and 20 lbs. for small ones, and the strength of material calculated accordingly. In some cases the small engines have been pushed on as high as 30 lbs. per inch, and the large ones to 20 lbs.; but the proportion of strength of material being much below that of small engines, they have been subject to serious derangements of the machinery.

Seeing no reason why an engine (say) of 100-inch cylinder should not have a load per square inch of piston equal to that of a 10-in., or, in fact, any other size, I would advise in future to fix the maximum load of all pumping engines, of whatever size, at 30 lbs. per square inch of piston, and by increasing the strength of material in proportion to the increase of load they would be equally safe, would furnish the mines with a considerable amount of power over the hitherto mode of working, and with an inconsiderable extra expense. With the same sized pumps used at 15 lbs. per square inch, a mine may be sunk to double the depth, or with pumps of double the area might be sunk to the same depth which can now be sunk at 15 lbs. The importance of this arrangement may be further seen, in the fact that its general adoption would considerably lessen the number of engines required at present, and be the means of effecting considerable saving to the mining interest.

I have in a great measure been led to these remarks by reading a letter in your Journal, which, agreeable to the signature, is the production of "A Cornishman." He must, I think, be from some remote part of the county, where the knowledge of steam-power must be in its infant state. If I say he is the most ignorant writer on steam-power that has ever come under my notice, I trust I shall not be considered too harsh, as there is a set-off in his letter, wherein he mentions the ignorance of Cornish engineers to all systems but their own. I should feel disposed to enlarge on this paragraph, but for his kindness in another part of his letter, where he states he has no wish to give too great a shock all at once; the latter part of his letter, showing a comparison between a condensing engine and a high-pressure non-condensing engine, is just enough to give any one a shock. Respecting the use of locomotive engines when compared with stationary ones, every practical engineer knows they will be used only when it is not convenient to use stationary engines.

I would only remark in conclusion that, if "A Cornishman" is positive his assertions are correct, respecting the high-pressure non-condensing engine being so much superior to the high-pressure condensing engine, I should be happy to assist him in promoting its adoption in the Cornish mines, as it would confer an invaluable benefit, not only to the mining interest, but also to everything requiring the aid of steam-power.

Redruth, Jan. 15. JAMES SIMS.

GOLD-BEARING QUARTZ, AND THE BEST MACHINE FOR CRUSHING.

SIR.—If the letter inserted in your last, under this heading, from "A Constant Reader of your valuable Journal," as he states, be the *bona fide* production of such a personage, I think he has read your Journal to very little purpose. I have frequently stated that there were no difficulties whatever attending the extraction of gold from its matrix—that it was done in South America with efficiency, dispatch, and economy, by means of stamps—and that had the recently formed gold companies intended to carry on legitimate operations in California, Australia, or even in Wales, they would have adopted the same means. But as the object of these companies in eight cases out of ten has been, and still is, that of mere jobbing, they find it more convenient to employ mysterious contrivances, which, under the direction of quacks, are to produce the gold some years hence, and shirk the use of proper appliances, under the control of qualified persons. I am happy to observe a slight change for the better in Veraguas, and it is to be hoped that that company will be faithful to Capt. Tregoning, and allow him to prove the value of the mineral property under his charge in the usual practical manner. If the Cambrian Company will adopt the same system, they will soon ascertain the value of their gold veins.

I beg to inform your correspondent that I never said "the gold was all deposited on the surface of the quartz," &c. I must refer him to my several works and papers on the subject, and also to numerous letters in your Journal. He will find therein that I maintain that all the gold quartz veins which have been wrought in South America, Veraguas, and the Ural, were generally rich near the surface, but became exceedingly poor and hard at shallow depths. Many small working companies, who were prudent enough to confine their explorations to superficial workings, and to move from place to place, as the veins became unprofitable, have obtained considerable riches; but public companies who have attempted sinking deeper, after private parties had taken away the riches, have lost all their capital. This is a well-known fact in all the old gold regions. The only gold mines that have been remunerative to public companies are the wide pyrites veins and ferruginous schistose bands.

However, as I have frequently stated, the quartz veins, which are strongly impregnated with iron pyrites, and which are often friable and decomposed, continue productive to a considerable depth. These veins are of a quality intermediate between the pure crystalline quartz and the pyrites—a difference which none of your correspondents appear to understand. But even these veins are only adapted to local companies. I have broken specimens of quartz with gold at many fathoms in depth in the gold mines of Veraguas, South America, and Australia, near Mount Alexander: the respective local companies, who were at the time working these quartz veins with very sanguine expectations, have since had sufficient cause to remember my opinion thereon.

I am well aware of the existence of rich quartz reefs in Australia. Such is the case in all new and unwrought gold regions, but to render these scattered outcrops of the quartz ridges remunerative to companies, it is necessary first to obtain a large grant. This being secured, and sufficient water obtainable at a moderate cost for stamping and washing, with cheap labour, all the rest is plain sailing.

But I would not recommend capitalists to advance a shilling in any of these speculations until they can insure honesty, good faith, and judgment, in what is improperly called "management" in London. The late transactions have been so truly reprehensible, and so deliberately committed by gentlemen whom the public thought they could trust, that

at the present time all those who have regard for their reputation will neither act as directors nor agents to carry on the works of such companies, until the stigma has been removed, and better security established. In the last Journal, you make the following observations:—

"To endeavour to revive these associations would seem to be like hoping against hope: not in one instance has a satisfactory result been arrived at. While American and Australian individual industry has been productive of success, English associated enterprise has only conducted to failure. Gold mining by the British mining companies has become a by-word and reproach. The funds are now nearly all expended; a solution of the question must soon be arrived at, and that will decide whether any of these associations for working gold in Australia and California will be in existence a twelvemonth hence." I ask, what has been the cause of this disastrous result? I say, it has been owing principally to the disgraceful conduct of the home management, and apathetic jobbing shareholders.

I have no hesitation in stating that more than two-thirds of the capital raised in England for these companies, together with the premiums paid on the shares, never left its shores, but was kept in England to enrich jobbers, to the injury of the shareholders and their confidential agents. If shareholders allow such things to continue, and, besides, advance more money to keep up such proceedings, they deserve to suffer.

38, Thurlow-square, Jan. 15. EVAN HOPKINS.

GOLD-BEARING QUARTZ—BEST MACHINE FOR CRUSHING.

SIR.—In reply to the enquiries of your correspondent, "Californian Gold Miner," I am not sure that the merits of crushing-rollers are fully ascertained: for my own part, I cannot see why rollers should not be made efficient for all sorts of crushing. In my experience of crushing different sorts of ores, I have found a rapid speed, with a light weight on the rollers or levers, applicable to the crushing of rough stuff, and a slow motion, with a heavy weight on the levers, adapted to crushing ores to a fine state; and, by a modification of the principle, almost any sort of crushing, I believe, may be effected. I have found, by experience, that 30-inch diameter rollers, under a pressure of 27 tons (levers 9 ft. long, with 1 ft. fulcrum, laden with 3 tons at the ends), with the surfaces travelling at a speed of 24 ft. per minute, constitute an excellent machine for crushing silver-lead, that requires fine comminution. Such a machine is capable of crushing pieces of quartz of 8 or 10 cubic inches, and of reducing 70 tons of ore in 24 hours to a state sufficiently fine to admit of cleaning silver-lead ore, which is generally much scattered through the matrix, mostly a hard siliceous rock, to a state in which it yields 75 per cent. of silver-lead ore, the 25 per cent. being almost always the sulphur in chemical combination with the ore. I should say, that without further adapting this machine to gold crushing, that from 8 to 10 tons of the 70 would be crushed to a slime sufficiently fine for washing for gold; but on this point I am speaking out of book. I contend, however, for the principle of crushing-rollers, as economical in comparison with any other, and that a pair of rollers might be constructed, of a size, laden with a weight, and made to travel at a velocity sufficient to crush the quartz submitted to them to an impalpable powder. It is evident that the larger the diameter of the rollers the more acute is the angle formed by the surfaces of them; and, consequently, they grip a large stone more easily than the small rollers formerly in use; but the principal thing in crushing stuff to a fine substance is the weight, and the length of time it rests upon the stone. It is easy to understand that a sufficient weight may be placed on any stone to crush it to powder, and by applying this principle judiciously, no matter how hard the stuff is, or how fine it is requisite to crush it, in my opinion it may be accomplished. I believe a gold quartz-crushing mill would answer very well with rollers of 3 ft. diameter, 1 ft. wide, weighted with 40 tons against the loose roller, and driven with a velocity at the surface of not more than 15 ft. per minute.

MATTHEW FRANCIS.

Goginan, Jan. 15.

THE BEST METHOD OF REDUCING GOLD-BEARING QUARTZ.

SIR.—I beg to refer your correspondent, "A Californian Gold Miner," to my paper in your Journal of March 24, 1855, for some information as to the best method for reducing gold-bearing quartz. In some cases I should recommend the Brazilian method of stamps and launders, with blankets, but as there is fully 50 per cent. loss by this method, I should be unwilling to recommend it as the best; but one that becomes absolutely necessary sometimes, from want of funds on the part of the mine owner to erect the more prompt and satisfactory one—viz., a Cornish single crusher, with 21 to 27 in. diameter rollers, then pass the coarse ground stuff to Mr. Wright's conical mill, or to Bursill's edge-runner mill, adding the quicksilver in these mills, and making the slime ore of the consistency that it will flow easily from this mill to a trough that will feed a Jordan and Bawden's hydrostatic amalgamator, &c. This system once established would run well, and be a cheap process. But before this or any other is fully established, to reduce 60 tons daily it will require the sum of \$500,000, or say 100,000*l.*, to be attentively laid out, and by men who had done some such work in other countries. The machines are not expensive, but the manual labour to erect the buildings under which they must stand is so; but once erected, they would last a long time in such climate as California. For the calcination of quartz, again I refer to my paper of March 24, 1855, in your valuable Journal. The expense either in heaps or kilns, like those used to burn limestone in, will be about \$1 per ton of 2000 lbs. for wood, and \$1 for labour, and if water be used to quench the red-hot quartz, which must be resorted to to obtain the best advantage from thus calcining, then add, say, 3 cents per ton for that operation, and the total costs will amount to \$2.03 for a ton of 2000 lbs. The system I have indicated may be either driven by steam or water power.

Trusting these hints may be useful to the "Old Californian Miner," I have only to request attention to the cost of gold mining, in my pamphlet on the Marble Springs Mine, which mine he probably knows well, or has heard of its reputation.

JOHN H. CLEMENT.

Gloucester-terrace, Church-row, Kensington, Jan. 14.

N. B.—There are several clever patents for disintegrating gold-bearing quartz, which may be very shortly laid before the public, as really likely to be useful and remunerative ones—commercially, as the term is now.

ALTGOED SLATE COMPANY.

SIR.—It is some satisfaction to a man when he lays out his money for investment and finds himself disappointed, that those to whom he has entrusted it have exerted themselves with laudable zeal to realise his expectations. There are many instances in which this has been done; but, unfortunately, they constitute the exception, not the rule. Among the companies which have been in direct contravention to this category, I may class the Altgoed Slate Quarry, in which, unfortunately, I am a shareholder, the affairs of which, to say the least of it, have been greatly mismanaged. I was led to take up shares in this company under the impression that I was investing my spare cash in a concern which was, to all appearance, and which every one believed to be, a *bona fide* one, and which would return at least a fair percentage for the money sunk. When I became a shareholder, nothing could be more cheering than the reported prospects of the quarry. The costs had not been met, but two dividends, of 1s. 6d. each, declared within 12 months. At the half-yearly meeting, July 21, 1854, the manager reported that the monthly raisings were considerably on the increase, and the prospects of the quarry highly satisfactory. Mr. Rowlands, the lessor, stated that he was fully prepared to carry out his original guarantee of returning 5000 tons of slate per month, if the unallotted shares were subscribed for. Can anything be apparently fairer than this, though it may be only a manoeuvre to make a market? Here was a company that, in its infancy was paying dividends—small, it is true, but still better than making calls; its produce was on the increase, and a pledge was given that a certain quantity of slate would be raised if specified conditions were complied with. Now, Sir, Mr. Rowlands was taken at his word, and the unallotted shares were issued. The scheme was consummated, and at the "corner" price rose from $\frac{1}{2}$, $\frac{1}{2}$, to 1*l.* 1*s.* In my simplicity, invested at the latter price, and the company has ever since gradually drooped, until at length it may be almost said to be at Death's door. In its vicissitudes, many efforts have been made to extricate it, but to no avail. Like Frankenstein, we had raised a monster from whom we could not extr

us take care that we have a committee who will watch, with a jealous eye, their own interests, which should be identical with ours. If this be done, we may look for the day when a genuine and continuous dividend will be declared, to compensate for delays and losses.—*City, Jan. 15.*

A SHAREHOLDER.

FOREIGN MINING AND ENGLISH COMPANIES.

SIR.—In perusing some of the late articles in your Journal, the uninformed in mining matters might suppose that it is the *localities* of the mines that cause the heavy losses that are incurred in mining speculations. It might be inferred from some of the writers that all foreign mines should be avoided, and that provided the English capitalists invest their money in the home mines enumerated in their lists, they would necessarily obtain large interest for their money. But how very different is the fact. It is not the locality that causes the losses and disgraces complained of—it is what is misnamed “the management,” and jobbing. It is precisely the same cause that has brought the English mining companies into disrepute in California and Australia as that which has led to so much loss and ridicule in Devon and Wales. How is it that the Welsh gold quartz veins have not yet been properly treated? Why do London companies avoid the service and advice of men of experience, and employ broken-down merchants, and the most ill-advised persons they could possibly select, to carry on their foreign operations? Because they are most suitable for jobbing purposes, and to do what they are told, so as to blind the shareholders.

The only difference between the foreign and home speculations is, that the former are beyond the reach of inquisitive shareholders. Hundreds of our home speculations have caused as much loss as the foreign speculations; and many of those called mines, which are so much lauded, are quite as injurious to legitimate undertakings as those which are ill-conducted abroad.

Notwithstanding the disadvantages attending the foreign mines, *eleven* of them have paid in dividends, during the last year, 209,320/-; whilst *sixty-five* of the British mines have only paid 355,341/-; therefore, legitimate foreign speculations should not be despised, owing to the conduct of the London management.

Let the shareholders of mining companies discourage and put a stop to the disgraceful system which they know is carried on; we should then see that legitimate mining speculations, under the control of honest and efficient managers, will succeed abroad as well as at home. I could name six or seven foreign establishments which have been, and still are, conducted as well as our best establishments at home, and many more of them could be brought to the same state, if the shareholders will exercise their power, and attend to their interest, to ensure honesty and support at home; and, above all things, to select proper agents, be faithful to them, and prevent the appointment of improper persons to carry on their business, to the disgust of all, and the ruin of the undertaking.—*Thurlow-square, Jan. 14.*

EVAN HOPKINS.

THE COST-BOOK SYSTEM—POWER OF TRANSFER.

SIR.—I shall feel obliged to any of your correspondents who can refer me to a legal decision, determining the power of transfer in cost-book companies. Many persons contend that registry of transfer of shares previous to a call releases the transferor from all liability through substitution of the transferee, the secretary’s act being tantamount to an acceptance of the nominee by the company. The opinion appears to me erroneous, inasmuch as the registry of transfer being merely the record of a transaction affecting the adventure is synonymous with the secretary, and cannot bind parties whose consent is neither asked nor required, while the fact of a shareholder being responsible to creditors for all debts contracted during the time the shares were held in his name appears confirmative of his inability to transpose liability in this manner. Admitting, however, the case to be otherwise, the conditions of transfer covenant that the transferee accepts the shares on the same terms as the transferor held them, and, consequently, any branch of contract through non-payment of call, or otherwise, annuls the transaction, and renewa the *status quo*, as the law binds both parties to the agreement equally, and will not sanction any act intended to injure the company, by the substitution of a defaulting or non-existing representative. In this view of the case, shareholders have the power at their general meetings of cancelling all transfers, the provisions of which have not been complied with, and restoring the shares anew in the name of the transferring party—a proceeding which it is to be hoped will be generally adopted, to protect adventurers against dishonest acts.

The anomalous position of cost-book companies, and the evils consequent on the irregular and illegal manner in which they are frequently conducted, calls for legislative interference, and will, I trust, meet with due consideration during the approaching discussion of the Partnership Act, particularly as under existing circumstances the Cost-book Principle has been made a means of perpetrating the most fraudulent acts, to the serious injury of legitimate enterprise.

ANTI-COST BOOK.

DIFFIDENCE OF ADVENTURE IN PROMISING BUT UNPROVED DISTRICTS.

SIR.—Pray allow me a small space in your columns to direct attention to the diffidence and scrupulousness to embark in mining adventures, however promising or favourably reported on may be the appearances, if the locality does not happen to be situated in a known rich district.

Seventy 20 years have elapsed since the discovery of copper ore at South Cadron brought the Liskeard district before the public in a new capacity; and, more recently, the finding of lead there has formed another important production of that part. The Tavistock copper district has also risen into great value at a still later date.

There are many sets remaining unworked in parishes not at present ranking as productive, where great quantities of copper and tin have, nevertheless, been raised, and where sales are still being made, having strata possessing all the elements of success, and containing lodes of the most encouraging nature; yet, there appears little chance of capital being employed in developing them, till some lucky or accidental discovery first opens out their richness.

In my humble opinion, Mr. Editor, more advantage would result to shareholders from a judicious outlay in some of these neglected places than in many of those mines to the great ones of the day, and the putative “prizes of the year,” where, doubtless, large sums will be unsuccessfully expended, and chiefly through the clamour and violent fancy of their position.—*Camberwell, Jan. 16.*

J. WILLIAM COLLINS.

TINCROFT MINE, AND THE LATE DIRECTORS.

SIR.—In the Journal of Jan. 5 I find a detailed report of the proceedings at the four-monthly meeting of this company, which prove that the adventure is being pursued with vigour, and that another dividend is likely to be declared in the course of a month or two. This is a matter of much congratulation to every shareholder, and I trust will continue to be so for years to come. But there was another point in the proceedings, which is one of vital importance to mining interests generally. I allude to the contemplated Chancery suit against three of the late directors, for conniving at a most unjustifiable and morally, if not legally, questionable act on the part of Mr. Stansby, also a director, for the purpose of enabling him to retain 1100 shares, upon which a call of 10s. per share was due, whilst others were sacrificed which remained unpaid. The facts are simply as follows:—A call was made on June 24, 1854, subsequent to which these directors accepted a cheque from Mr. Stansby, dated Oct. 31, for 560/-, in discharge of the call. This cheque, instead of being paid into the bankers to the credit of the company, was placed in an envelope, sealed up by one of the directors, Mr. Hodgson, and put in a drawer, in the presence of Dr. Spurgin and Mr. Wilkinson. It was never met, nor, I believe, presented for payment; yet Mr. P. Stansby wrote off his calls as paid on November 30, at which date the directors forfeited all calls in arrear. Sometime in December a promissory note was taken by them from him, in lieu of the cheque, bearing the same date as the “no effects” cheque, and which, on coming to maturity in three months, was dishonoured. On the 5th of the following month the acceptor presented his petition to the Court of Bankruptcy, and the note has never been since paid. There was a similar case to this occurred to Mr. Stansby, in connection with Wheat Guskus, in which he is charged with having written off 1100 shares in like manner, and forgetting to bank the cash, through which a case was recently tried in the Exchequer Court, at Guildhall.

The present board of the Tincroft Mine, no doubt actuated by the best of motives, have come to the determination to try whether a suit in Chancery will not bring in the friends of Mr. Stansby to their propensities, and compel them to make good his defalcations on compulsion, which they refuse to do by any other means. It is very justly said, that as these gentlemen have evinced an utter disregard to the interests of the company of which they were the guardians, and had neglected to enter the transaction on their books, at the same time neither provisionally or actually forfeiting the shares, but absolutely permitting the calls to be endorsed on them, and promulgating a statement that all unpaid shares were forfeited. Under these circumstances, having wilfully stood between the company and Mr. Stansby, to the prejudice of the former, they ought themselves to bear the consequences entailed on them by his shortcomings.

Though, as a shareholder, I am reluctant to enter within the precincts of the Chancery Court, grown venerable, as it is, on the blighted hopes of anxious expectants, and the utter extinction of colossal fortunes, yet I cannot, considering all things, withhold my support from the present directors, who in taking them will have sounded the true key-note of commercial morality, and in doing so deserve the thanks and countenance of every well-wisher to mining and mining investments, as the point involves the consideration of a question the decision on which will not be without its effects on boards of directors generally.

A SHAREHOLDER.

STAMPS, AND THE DELUSED CAMBRIANS.

SIR.—Will ever the public understand the difference between mechanical and chemical treatment? Stamping is simply a mechanical contrivance, which has been used a very long period for pulverising many of the ores that are produced. It is, no doubt, the cheapest method known, and is, therefore, so universally adopted at copper, tin, lead, silver, and even gold mines: the jactoing and auriferous sulphurates of South America are in nearly every instance brought under the stamp. There are likewise a few places in different parts of the world where quartz is stamped, but the stuff must be very rich in metallic gold to leave a profit by the treatment of so wasteful a process as simple stamping and washing quartz gangue; but where the gold is not metallic, stamping can be of no avail without the addition of some chemical process. For instance, in certain parts of both North and South America pyritic ores, which contain no metallic gold, are stamped or crushed, then exposed to the atmosphere, slow decomposition following: the iron becomes freed from sulphur, and absorbs oxygen instead; the gold having no affinity for the oxidising iron, and being likewise liberated from sulphur, collects itself into small metallic particles and globules, after which washing is successfully resorted to.

The Cambrian Gold Mine has seven well-defined lodes, five of which will produce gold by proper treatment, but only a very small part of one of them has shown any visible gold—viz., No. 6. The metallic gold in this lode is confined to the line of two strings which traverse it—one 1 in. and the other 2 in. wide; these strings are continually lost for some distance, and the gold appears here and there in dendritic forms. Now, this visible gold quartz will yield one-third its gold by the process of stamping and washing, and the delusion the Cambrian shareholders are labouring under is either that they have a quantity of this visible gold quartz, or that the stamps have the power to make the gold visible in ore from those veins in which there is not one speck to be seen. When they have wasted their money the mistake will, perhaps, be too self-evident, and they will find that all the gold ores they can produce in any quantity from four of their lodes, and the great bulk of the ore from No. 6 lode, will not give them one grain of gold, if all the stamps were used at present in existence. If they wish to test the truth of my assertion, let them look up No. 6 lode, and stamp stuff from any of the other lodes, or try 50 tons of ore taken from that side of No. 6 lode where the gold is not visible, and they will find that no mechanical process will develop one atom.

I believe this property to be a most valuable one, if the ores have proper treatment, and then there would be no occasion to waste the little bit of visible gold quartz under 12 stamp-heads to get a result, as the great source of profit and wealth would be found in thousands of tons where none appears visible. I have no motive whatever to serve for or against this company; my opinion is impartial. If I have any interest in the matter, it is simply the very great one I feel in the success of “gold mining in Eng-

land;” for I am tired of waiting the failures of practical ignorance and quackery, and I think it is time that “gold quartz mining” was getting fair play.

189, Strand, Jan. 16.

JOHN CALVERT.

NETHER HEARTH, AND THE WHIN SILLS.

SIR.—I am no advocate of igneous or aqueous theories, and, therefore, feel sorry for your correspondent, “Durham,” calls upon me to defend one theory against another, inasmuch as my observations have long since led me to conclude that both igneous and aqueous action have alternately and conjointly played their several parts in giving the superficial crust of this world the appearance it presents to us. I love to accumulate facts more than theories, and am richly stored with geological sections and drawings of things as they occur in nature from many parts of the globe, and have eagerly collected plans of underground workings in whatever mining countries I have travelled through, or wherever professional engagements have caused me to go. This easily accounts for my recognising so very few of the theories put forward upon geological subjects, as the bulk seems to me to have grown out of imaginary hypotheses, and have no analogy with Nature’s productions. We want more out-door field men, and fewer of the class who are always trying to twist things to suit their own views; more honest collectors, who will simply see objects as they really are.

Your correspondent, who seems to belong to the old school, which, perhaps, is not the best, as far as the science of geology is concerned, is evidently in some mystification about basalt, or “whin,” and I am sorry I have not time to set him right upon all points; but I think, if he had been present with me while visiting the craters of several living volcanoes, he would have more easily recognised the five-sided columnar structure that the lava had assumed; likewise in some of the breaks of recent overflowing masses that had cooled, as well as many hundred instances of columnar basalt in the immediate vicinity of extinct eruptions. Perhaps a sight of these things, and a more extended knowledge, would have caused him to attribute a different origin to his friends at the Giant’s Causeway.

Neither do I think it possible that, in this present age, when Truth and Science are hotly contesting every inch of ground with Assertion and Quackery, that a man would be found so ignorant as to assert, because a lead mine was rich, that it had once been a pot of boiling metal. If such were ever the case, then I have nothing more to say; but one thing I will add—that the pot must have boiled over at Nether Hearth, as there is plenty of lead in nearly every direction round about it.

JOHN CALVERT.

CAEGWIAN MINE, AND RESUSCITATED CAMBRIAN.

SIR.—Your correspondent’s letter, under the above heading, contains some opportunity remarks, urging upon the Caegwian Company the application of the proverb, *Audentes Fortuna juvat*. The Caegwian Company would be much gratified at the fullest realisation of good fortune attending the use of stamps at Cambrian, and would doubtless follow in the same track, should Mr. Low’s experiment fail; but, having started with the intention of seeing the applicability of that process, I submit the reasonableness of an equally well-known maxim of perseverance—*Semper ad eventum festina*—for, notwithstanding the disappointments the company has already experienced by the delay of Mr. Low’s operations, some reliance still remains that they will eventually prove successful.

Although accused of an overweening adherence to Mr. Low and his theories, the Caegwian Company will only be too glad to grasp at *any* means of success within reach, and will perseveringly adopt such means as a substantial advantage towards securing commercially the riches of its mine; but an important element rests on the assumption that the reduction by *fire* will extract a much larger per centage of the precious metal than that of *washing*. I believe statistical information proves that at the Brazilian Mines washings of 75 per cent. of the gold is lost by the washing system there adopted; while, however ridiculous such pretensions may appear, Mr. Low holds out, and is sanguine that the result of his patent will render available a much greater per centage of the gold contained in the matrix operated upon.

In consequence of the unlooked-for and most extraordinary delay in completing the trial at Rotherhithe, and of the present determination to extend the quantity of ore forming that trial of which I have been informed since my last letter, I regret to state that no definitive result can be arrived at by the time named in the minutes of the Caegwian meeting; this determination on the part of the gentlemen interested in developing the practical use of Mr. Low’s patent will, doubtless, add to the commercial value of the trial, although it proves to be most detrimental to the present interests of the Caegwian Company.—*Jan. 18.*

J. B. BALCOMBE, Sec.

THE COLOGNE MINING COMPANY.

SIR.—In your Journal of Saturday last, in some leading observations on the subject of the Cologne Mining Company, you have commented on the part which I took at the public meetings of the shareholders on Dec. 29 and Jan. 4.

However much gratified I may be at the compliment you pay to me when you mention my high professional ability and experience, I confess that gratification is completely neutralised by the subsequent observations which you make—namely, that the view I took of the position of the company was calculated to “mislead” the shareholders. I trust, therefore, to your known impartiality, to permit me to make some observations in reference to the legal opinions which I have given, and on the mode in which those opinions are confirmed, and I shall be quite satisfied to leave the result in your hands.

This is the more necessary, as your Journal, in addition to its extensive circulation in England, is recognised in the western states of Europe as the official organ for all questions relating to mining matters abroad; and observations from you, therefore, as to the legal effect of the constitution of foreign companies, carry more weight than you can even be aware of; consequently, the observations you have made, calling in question the soundness of the legal opinion which I expressed, will, if unnoticed by me, necessarily tend to diminish the confidence which our foreign, as well as English, connection have heretofore reposed in our judgment in these matters.

The question which came before the shareholders of the Cologne Mining Company is a very simple one, but it is one of great importance to every company which has been established under French or Prussian laws as a *Societe en Commandite*.

The Cologne Mining Company was constituted in Prussia, under the commercial law, as a *Societe en Commandite*, by statutes deposited at Cologne on April 27, 1853; the special feature of which was, of course, the entire freedom of the shareholders, or commanditaires, from all liability whatever. This company has, therefore, been recognised by the Prussian laws, and especially by the mining department of Prussia, as a *Societe en Commandite*. The council of supervision called a meeting of the shareholders at the London Tavern, on the 29th Dec. last, and then informed them that, in consequence of Mr. Holbrook, the late gerant of the company, having absconded, taking with him some funds of the company, they had consulted Mr. Neissen (an advocate at Brussels—not a German advocate), as to the steps to be taken, and that gentleman had advised them that they had been under an error, from the beginning, in supposing that the society was one *en Commandite*; for that as its statutes limited the operations of the company to “raising, working, and selling the produce of its own mines,” and the power to purchase minerals to sell them again had been omitted, it was not, therefore, a commercial company, to come within the provision of the *Code de Commerce* as a *Societe de Commandite*; but that, on the contrary, it was an ordinary partnership, or *Societe Civile*, with all the liabilities and consequences of such a partnership. The council then stated that they were advised to place the company under the ordinary mining law of Prussia, and that this would give them more control over the funds and property of the company.

Mr. Neissen was consulted by several shareholders, having a large stake in the company, on the day previous to the meeting; and under their instructions I attended at the meeting of Dec. 29, and contended for three propositions:—

1. That the Cologne Mining Company was still a *Societe en Commandite*, and that it was sufficiently commercial in its character to come within the *Code de Commerce* of Prussia as such.

2. That if, as the council had been advised, the company were not a *Societe en Commandite*, then it could not be converted into a partnership company, under the Prussian mining law, without the consent of every shareholder.

3. That under the Prussian mining law there was some degree of liability, but that there would be also, under that law, power for the directors to make calls to any extent, either to discharge debts, or to carry on the operations of the mine; and, in default of payment, to forfeit the shares; whereas, under the original society, the faith of which every shareholder had paid his money, there was an entire freedom from all liability, and no power whatever in the directors to make a call upon the shares, or to forfeit them.

Whether or not I was correct in these opinions I must leave to your judgment after perusal of the following observations:—At the meeting on December 29 a resolution was passed, referring the questions as to liability to Mr. J. H. Lloyd, the eminent barrister; and I was instructed to attend at a conference to be held with him, and at which Mr. Neissen would be able to explain his views. I have now to state the result of this course, as also of my further enquiries into the questions at issue—

1. The first question, as to whether the company is still a *Societe en Commandite*, not being referred to Mr. Lloyd, he did not give any opinion on it, but I have since obtained the opinions of two of the most eminent advocates in Cologne; and, without improperly calling in question the opinion of Mr. Neissen, for whose ability I entertain very high respect, I cannot but think that the opinions of two German advocates of their position are entitled to more consideration than that of an advocate in Belgium, however well read he may be in Prussian law. The two German advocates to whom I refer, confirm fully what I stated at the meeting—viz., That the Cologne Mining Company is still a *Societe en Commandite*, recognised by the Government authorities as such, and that the mines are entered as belonging to such a company.

2. On the second question—namely, whether, if the company be not a *Societe en Commandite*, the council can convert the same into a partnership company? I need only refer to the written opinion of Mr. Lloyd on this point. Mr. Lloyd says:—“I think it necessary to say that, for the protection of the directors, it would be necessary that the assent of each shareholder shall be given to the proposed change.”

3. As to the third question—namely, the extent of liability—I quote the joint opinion of Mr. Lloyd and Mr. Neissen:—“In the event of the effects of the society being insufficient to meet its debts and liabilities, the several shareholders will be liable (not directly to the creditors, whose immediate recourse will be only against the party or parties by whom the orders were given), but ultimately as contributories, rates will be limited to debts properly and legitimately incurred, in accordance with the authority given by them.”

With regard to the forfeiture of shares under the Prussian mining law, it is, of course, admitted upon all hands that the directors would have power to forfeit them for non-payment of any calls which they might think it necessary to make. I venture, therefore, to submit that as my views are confirmed in every particular by good authority, you will scarcely think the expression “mislead” was applicable to the views I expressed at the meeting.

I will not trouble you with observations as to other difficulties and other consequences of the proposed change, as I confine myself expressly to the justification of my opinions expressed at the meetings; and which opinions subsequent examination of the subject has entirely confirmed. I omit, also, all observation as to the desirability of placing this company’s affairs under the Prussian mining law, which I admit, under certain regulations, could be made to work very beneficially for shareholders. I merely protest against the name which is being employed, and suggest greater consideration of that subject, with a view of avoiding much more complicated difficulties hereafter; and I cannot but think it would be more safe, and more satisfactory, if the council were to adopt the ordinary legal mode of dissolving the company, and re-constituting it on the basis of the Prussian mining law.

My clients are interested in common with other shareholders, in the success of the company; but, apart from the reasons which I have stated, they conceive they have good grounds for dissenting from the course proposed by the council. There are claims, liabilities, mortgages, &c., which they think ought to be enquired into: for these, there is not at present any liability on behalf of the shareholders; and if examined into, reduced, or satisfied, would probably diminish the amount of inglorious debts upon the shares.

In carrying out such a course, and in legally re-constituting the company, and pro-

viding funds for carrying out the enterprise, my clients would cordially co-operate with the council; but as it must be clear that the consent of every shareholder must be obtained to what is now proposed, it appears to them to be useless to attempt that which must produce litigation, here and in Prussia.

It is due to the council of supervision to say, that although I differ with them so much as to the course they are adopting, still I am sure they are actuated by the very best motives, entirely apart from all personal advantage; and they have lately shown substantial proof of the confidence they have in the undertaking, and the desire they have to ensure its success.—*Essex-street, Strand, Jan. 17.*

In reply to several questions, the CHAIRMAN further remarked, that he was not on the committee at that time, and could not say whether there were any free shares or not, of his own knowledge; but he believed that the promoters of the re-issue, in consideration of their exertions, received about 1000 shares. Mr. Smith had been sent down to report on the quarry, and were they in possession of his report, they would have been in a situation to have determined what steps to take.

Mr. L. WEBB, referring to the Share List, said he found they had only 1300 shares subscribed, when they ought to have had considerably more than that amount. He would remind the committee that they had no power to carry on the affairs of the company unless the entire capital was subscribed.

The CHAIRMAN said that when they found the 8000 shares were not taken up, and it was necessary to make a call, they were compelled to reduce the share capital to £9000, as they found the shareholders would not come forward until the shares in hand were disposed of. Under these circumstances, they took the advice of eminent counsel, who was of opinion that they had the power to make the alteration under their Deed of Settlement.

Mr. L. WEBB was not sure that they could not be made to account to the shareholders, and be held responsible.

Mr. Gwynne understood that a call could not be made, and it was with this impression he purchased his shares. Had he been aware that no power existed to call upon them for any further contributions, he would have had no power to do with the company. However, they were not to see what was to be done. The question was now, whether they were to go on or wind-up: if they determined on the former, it appeared to him that to make trifling calls was a mere waste of money. For the purpose of carrying on the quarry, and bringing it into a perfect state of working, they ought to have at least 1/4 per share, or £6000. To raise this, could not a company be formed under the Limited Liability Act?

Mr. L. WEBB said, as they were at present situated, every shareholder could be individually sued for the company's debts. It appeared to him, therefore, that the first question was their financial position. He would like to know what they proposed to do with calls due, the money they had in hand, the mode of expenditure, and the amount of slate they had on the quarry?

The CHAIRMAN replied that the questions were important, but he thought they were not to the purpose of the meeting.

Mr. L. WEBB said they were, according to the circular convening the meeting, called upon to "take into consideration their actual financial and general position."

The CHAIRMAN answered that it would have been so, had not they been called upon to convene this meeting, thus anticipating the results of the committee's inquiries. Mr. L. WEBB thought that as the meeting was called in conformity with a requisition, the committee ought to be prepared to lay before them as much information as possible. He saw, from the bankers' pass-book, that they had only 54,188 in hand. What was the amount of their liabilities?

The CHAIRMAN said 6000, but their assets would more than cover that sum. If they intended to carry on the quarry with success, they had heard the report, which gave them reason to expect a great deal. It was true a great deal of money had been expended, but it had been profitably sunk. As Mr. SMITH gave them encouragement, the question was, whether they should go on or wind-up. He considered they ought not to come to a conclusion hastily, but should weigh carefully every fact, and it would then be competent for them to decide on their course. He would remind them that the quarry had been badly managed by their late secretary and purser, who had neglected their interests in every way, and it would be for them for the future, if they determined to carry on their works, to have no jobbing secretary, nor one that could hold shares. He should be thoroughly equal to his duties, and well paid for his services. He firmly believed they had a good property, and knew that there was a constant demand for their slate, which, with competent management, would return profits.

After some further discussion, a resolution was proposed by Mr. WEBB and seconded by Mr. C. D. BURR, to the effect that all expenditure on account of the company, except such as was absolutely necessary to prevent the forfeiture of the lease, be forthwith stopped; and that the committee be requested to use every exertion to realise the stock, to meet existing liabilities, and that the meeting be adjourned to Friday, Feb. 1, to receive the report of the committee, whether the company should be discontinued or otherwise.

Messrs. C. D. Butt and Nicholas were then elected to fill up the vacancies in the committee; and after a vote of thanks to Mr. Gwynne, for the use of the room, the Chairman, and the secretary, the meeting separated.

NANTLLE VALE SLATE COMPANY.

The general half-yearly meeting of shareholders was held at the offices, 32, Moor-gate-street, on Wednesday.—Mr. C. WING in the chair.

Mr. BACON (the secretary) read the notice convening the meeting, and the minutes of the last, which were confirmed. He then read the report of the committee of management, as follows:—

Your committee beg to lay before the shareholders a report from the manager of the works, with a financial statement from the general meeting in Nov., 1854. Your committee, upon the declaration of the last dividend, were under the conviction, from the very favourable state of the works, that the undertaking would continue in a dividend-paying state. They regret, however, to add that the unavoidable delay consequent upon carrying on negotiations for the obtainment of water-power, and the subsequent delay in making and fixing the machinery to be attached to the engine, and the necessary inclines and tramways, have prevented them during the last year from carrying on the works in a profitable manner. At the same time, they have much satisfaction in stating that these arrangements are now on the eve of completion, and that they will in the course of two months be enabled to put on 14 bargains for slate making at the two quarries, each of which may be estimated to raise from 20 to 30 tons per month. The total value of slate raised from the commencement is 38,637. 17s. 8d., the greater portion of which was made from the eastern quarry, during the year 1854.

It will be seen from the financial statement that the liabilities of the company to Dec. 31 amount to 3200. 1s. 3d., against which two calls have been made, one payable on Jan. 1, and another on Feb. 1, amounting to 573. 15s. The capital remaining to be paid upon, amounts to 5366. 2s. 6d., which is considered a sum fully adequate to open the quarry on a scale sufficiently large to produce a very profitable return on the investment. The retiring members of the committee at the present time are Messrs. Wilkinson and Wing, both of whom are eligible for re-election.

Your committee would recommend, at the commencement of the spring, the resumption of the works at the adit from the lake, as only about 50 yards more cutting is required to reach the Victoria Quarry. The committee have lately entered into an arrangement for the hire of the farm, at a rental of 20/- per annum, which will enable them to keep their horses for the carriage of slate and coal, and also prevent them from severer exactions in the shape of surface damage.

Mr. BACON submitted the report of Mr. J. Horne, the manager of the quarry:—

Ty-Mawr Quarry, Jan. 15.—In taking a retrospective view of the proceedings at the quarry during the past three years, and observing the important results that have been achieved, and the present promising aspect of the works, there is no reason to regard the advantages anticipated at the outset as unattainable, although at a protracted period, owing to the numerous unforeseen difficulties we have had to contend with. The advanced progress of the development of the property, and the adequate provisions made for the effectual prosecution of the works in future, are subjects of congratulation: whilst it is gratifying to learn that our produce of slates from the eastern quarry has not been exceeded by that of any other quarry under similar circumstances. You must have noticed, during your recent inspection of this quarry, the extent of rock that has been uncovered, of which no more than one-half has been worked upon to a depth of 14 yards, and only a sixth part of the whole area has reached a depth of 20 yards from the surface, the remaining portion not exceeding 7 yards in depth; yet notwithstanding the shallowness of our present workings, the slates manufactured therefrom have realised 3000/-, therefore the rock must have been remarkably pure, and of no ordinary description. The returns of slates from the western quarry have not exceeded 800/- worth; at the same time, the expenditure made in draining this quarry, removing overburden, and in clearing the dead rubbish which had accumulated in it, is equal to one-half of the whole outlay that has been incurred; it is, however, now in thorough working order, and as soon as the arrangements for connecting it with the engine are completed, it can be worked to great advantage. The present prospects at both the preceding places are of the most flattering character, and they will, undoubtably, yield immediate and ample returns of slates. I shall only add that whilst the operations at the adit and the Victoria Quarry remain suspended, the company are neglecting the finest portion of their slate rock, and one that would soon yield them handsome dividends, if prosecuted with energy and spirit. I would also beg to suggest the propriety of making the best use of Ty-Mawr farm, for keeping two horses to cart the slates, coal, &c.; a cart and some half a dozen trucks would be required as well. Should the company not concur in this view, I should be glad to take the farm of them at a rental of 15/- per annum, leaving the farm-house at their service, to be converted into a carpenter's and smith's shop, and the company be at liberty to trespass upon it without any molestation.

The CHAIRMAN said, in rising to move the adoption of the committee's report, the financial statement, subject to audit, and the manager's report, it devolved on him to offer some remarks on their present and prospective position. This was the third anniversary of their meeting, and he could not regret that their progress had been retarded by a variety of unavoidable causes. Much inconvenience and delay had arisen, owing to a protracted correspondence for six months ending May last with the owner of the quarry and his agent, relative to the right of water-power, at the expiration of which time, Mr. Thomas, the present proprietor, coming of age, it was discovered, to their great disappointment, that it had been leased to another company. This protracted correspondence was conducted with much ability and judgment by Mr. Bacon to its close, and they were greatly indebted to that gentleman for the zeal and energy displayed by him on behalf of the company. Another cause of delay arose from an arrangement entered into with Messrs. Medwin and Hall; these gentlemen were engaged to put up machinery and connecting rods to bring the eastern and western quarries together, but they could not complete their contract to the end. They were then compelled to have recourse to other parties, and arranged with Messrs. Owen, of Carmarthen, for the completion of the machinery on the quarry. It was now ready for fixing, and in about two months would be in working order. When this was consummated, and the machinery in operation, it was computed they could raise monthly eight bargains from the eastern quarry, and six from the western, which together would yield about 300 tons of slate, or in six from the eastern, at a depth of 40 yards, about 800/- worth—making from the commencement a total of 3633. 17s. 8d. One-half of their outlay had been incurred at the western quarry. They had sold 3424. 9s. 5d. worth of slate, and had on hand about 4392. 8s. 5d. worth. From the commencement of the undertaking, they had expended 4500/-, and had yet an unaccrued-up capital of 5366. 2s. 6d. With regard to their anticipated returns of 6000/- per month, its realisation, of which he entertained not the slightest doubt, would again bring them into a dividend-paying state, and would give rise to a feeling of satisfaction on the part of the shareholders, who had placed so much confidence in their management, and came forward on all occasions to support them in their endeavours to promote the interests of the company. He must repeat that they had met with unusual difficulties, but trusted that, before the close of the year, they would again meet under more favourable circumstances. He would conclude by moving the adoption of the report.—Carried unanimously.

Messrs. Wing and Wilkinson were re-elected members of the committee; and the meeting, after passing a vote of thanks to the Chairman and secretary, separated.

ENGLISH AND AUSTRALIAN COPPER COMPANY.

A special general meeting of proprietors was held at the London Tavern, on Thursday.—Sir Wm. FOSTER, Bart., in the chair.

Mr. BENJ. WILKINS (the secretary) read the notice convening the meeting, which was called for the purpose of receiving a communication from the directors with reference to the affairs of the company since the last annual meeting, their financial position, and to consider a proposal made for the purchase of a portion of the company's property.

The CHAIRMAN said, that being personally interested in the proposition to be laid before them, he did not intend upon the present occasion to occupy the chair; but,

wishing to have the case properly laid before them, and that he might stand in the honourable position he had hitherto done, he consented, upon the opening of the business, to take his usual position. About 12 months since, they were called together to raise 55,000/- for the use of the company, by issuing debentures. This was at that time readily conceded; but, being unable to raise such a sum, they had been in difficulties ever since, and at last the directors were compelled to meet to consider what course they should pursue, when, after much deliberation, it was agreed that the only method of effectually relieving the company would be by the sale of the Spity Works, as it was found that they could not dispose of the Australian property, in consequence of being under several contracts. The next question for the consideration of the board was the method by which the sale should be effected. It was hinted that the works should be disposed of by auction; but it was unanimously agreed that the preferable course would be to dispose of it by private sale, and the managing director was requested to find a purchaser. Finding the difficulty of obtaining a buyer, he made an offer to the directors, which they agreed to accept, subject to the approval of the shareholders. No communication upon the subject took place between his brother-directors and himself until after he had made the proposition. Although he had an enormous number of proxies offered to him, he determined to reject them all; and notwithstanding this (Sir Wm. Foster) held 20,000 shares, he should not make use of them on the present occasion. His offer was a free and honourable one, which they could either confirm or reject. Having stated thus much, he would retire from the chair during the remainder of the meeting.

Mr. H. W. SCHNEIDER then took the chair.

Mr. SPENCER HERAPATH wished to know whether Sir Wm. Foster did not intend to vote upon the 20,000 shares he held?—Sir Wm. FOSTER: Certainly not.

Mr. SUTTON wished to know whether other members of the board would not use proxies?—THE CHAIRMAN said, there was not a single proxy in the office.

A PROPRIETOR considered it would have been preferable to have published the particulars of the proposition with the notice of the meeting.

The CHAIRMAN wished to place the matter in a proper light before them, and hoped, in doing so, he should not be interrupted. In the first place, he would lay before them the position of the company. It was expected that 35,000/- would have been raised by the issue of debentures, but only 11,000/- was taken up, and they had every reason to believe, from the reports of Mr. Hamilton, that he would have been able to have converted into cash some of the company's property in Australia. It was necessary to send out smaller and wagons, and harness to work the mules they had obtained from Chili, and from which were expected large returns, but they had been disappointed through two causes—one, the financial crisis that had occurred throughout the Australian colonies; and the other, labour having become cheaper. The Burra Burra Mines were in full work, and Mr. Hamilton was obliged to devote the money to the payment of the ore delivered by that company. The directors found, in Sept. last, there was a deficiency of capital to carry on the concern, which was met by advancing loans to the end of the year, by which time they expected to hear from Mr. Hamilton that he was in a position to send remittances, but he was unable to do so, in consequence of the satisfactory position of the Burra Burra Mines, which must prove of great advantage to this company, as they had been supplying richer ore, whereby a larger payment was made for doing the same amount of work. The works in Australia were in a most satisfactory condition. On the 14th of October last they had three furnaces alight, and Mr. Hamilton hoped soon to get three more. The coals sent out had arrived, and the carriage was going on very satisfactorily. The finances in the colony had improved, Mr. Hamilton having got rid of all the loans, except about 1700/-, and he hoped now to get sufficient to repay the expenses and pay for the coals sent out to him. He had made arrangements with some fast-sailing vessels, and he hoped to send 3000 tons of ore within the next six months, which would give a sensible relief to the finances on this side, but the liabilities were pressing and the returns distant, as a portion was now on the way from Australia. The present liabilities were 55,000/-, to meet which they had only 12,500/-, and even that not all immediately available. Under these circumstances, he (the Chairman) had to submit the proposal made by Sir Wm. Foster, which was to purchase the Spity Works, and property in Cornwall, for about 48,000/-, part of that amount being made up by valuation; but if it were preferred, Sir Wm. Foster was prepared to give 48,000/-, without valuation; and it was for them to consider the proposition, as it must be evident to all that they must have some relief without further delay.

A PROPRIETOR wished to know what the Spity works cost, according to the original prospectus?

The CHAIRMAN replied, 42,500/-, and there was about the same amount of copper on the prospectus as at the present time.

A PROPRIETOR enquired the value of the company's property in Australia?

The CHAIRMAN said, when the account was made up to Jan., 1855, it was valued at 150,000/-, even if broken up; but since that time they had greatly improved the works, and expended 35,000/-, so that the present value might be fairly calculated at 200,000/-.

A resolution was then put, that the proposition of Sir Wm. Foster, for the purchase of the company's property in Wales and Cornwall, be accepted—the Spity Copper Works, colliery, wharf, and steam vessel, for 23,000/-; the implements by valuation, in the usual way: the ore to be paid at cost price, and copper and slag in bottoms by valuation.

A very lengthened and angry discussion ensued, during which an attempt was made to adjourn the meeting; but, at the solicitation of a number of shareholders, Sir Wm. Foster increased his offer to 50,000/-, without valuation, which was accepted, with only two dissentients.

Sir Wm. FOSTER said, the shareholders having agreed to the proposition, he trusted that every one in the room would consider that he had made the offer solely for the benefit of the company, of which he was the largest shareholder.

A vote of thanks to the Chairman terminated the proceedings.

THE LONDON AND WESTMINSTER BANK.

The half-yearly meeting of proprietors was held at the Bank, in Lothbury, on Wednesday, The Right Hon. The LORD MAYOR in the chair.

The SECRETARY read the notice convening the meeting, and the minutes of the last meeting, which were confirmed. The following report of the directors was read:—

The directors have the pleasure to report that, after making provision for all bad and doubtful debts, paying the income tax, setting apart 2000/- towards the new buildings in Lothbury and Bloomsbury, and presenting a gratuity of 10 per cent. on their salaries to all the officers of the establishment, the net profit of the bank for the last half-year amount to 78,494. 8s. 5d., which, added to 7251. 16s. 9d., the unappropriated profits of the preceding half-year, make a total of 86,229. 5s. 2d. Out of this sum the directors have allowed interest on the Rest, or Surplus Fund, at the rate of 5 per cent.; and they now declare a dividend to the shareholders, at the rate of 6 per cent. per annum, and also a bonus of 5 per cent. upon the paid-up capital. After these payments are made, there is a balance of 27,731. 0s. 4d. to be transferred to the Rest, or Surplus Fund, which now amounts to 141,109. 19s. 4d. The directors who go out by rotation are William Haigh, Esq., Joseph Edale, Esq., and John Stewart, Esq., all of whom being eligible, offer themselves for re-election.

London and Westminster Bank, December 31, 1855.

| | |
|---|-----------------|
| Dr.—Proprietors for paid-up capital | £1,000,000 0 0 |
| Amount due by the bank | £6,241,594 15 9 |
| Amount of Guarantee Fund, June 30, 1855 | £158,373 0 8 |
| Six months' interest on due, at 5% p. c. p. a. | 2,375 11 11 = |
| Undivided profit for the last half-year | 160,748 12 7 |
| Amount carried to profit and loss account | 35,124 9 2 |
| Total | 92,106 9 4 |
| Dr.—Current expenses, proportion of building expenses, directors' remuneration, bad debts, income tax, &c. | £23,679 7 8 |
| Amount carried to Profit and Loss, new account, being rebate of interest on bills discounted not yet due | 23,196 10 4 |
| Amount transferred to credit of Guarantee Fund, in addition to above amount of 160,748. 12s. 7d. | 105 0 6 |
| Dividend account, for payment of half-year's dividend, at the rate of 12½ per cent. per annum, upon 600,000/- paid up capital | 37,500 0 0 |
| Ditto for payment of a bonus of 14s. 3d. per share | 43,750 0 0 |
| Total | £127,230 18 6 |
| Cr.—Exchequer Bills and India Bonds | £810,925 11 8 |
| Cash, loans, bills discounted, and other securities | 6,280,073 15 2 |
| Building, furniture, &c., in Princes-street | £30,200 0 0 |
| ditto ditto in Pall Mall | 8,375 0 0 = |
| Total | £38,575 0 0 |

PROFIT AND LOSS ACCOUNT.

Dr.—Total expenditure of the seven establishments, including rent, taxes, salaries, stationery, &c., with a gratuity of 10 per cent. on their salaries to the officers of the establishment..

Amount set apart towards the new buildings in Lothbury and Bloomsbury

Payment of dividend now declared, at the rate of 6 per cent. per annum, for last half-year on paid-up capital of £1,000,000/-

Bonus of 5 per cent. on the capital

Rest, or Surplus Fund

Amount on July 1, 1855

Interest on ditto, at 5 per cent.

Balance of profit and loss account

Total

£256,001 13 8

Cr.—Rest, or Surplus Fund

Balance of profit and loss account on June 30, 1855

Gross profits of last half-year, after paying income tax, and

FOREIGN MINES.

The St. John del Rey Company have advices from their agents to Nov. 17:—The produce for Oct. is 30,396 oits. (less duty, 5 per cent., 1520 oits.) = 25,876 oits.; at 7½ d. 11,069. 2s. 8d.—Cost, £s. 62,140 99s.; at 27½ d., 7086. 4s. 8d.: leaving balance, 3982. 18s. It is gratifying to note the improvements in the month. The costs are higher than they would have been, owing to the greater consumption of iron, in timber, pumps, and gunpowder; in addition to which about 4000 cubic ft. of charcoal were used in overtime work, and the manufacture of stamps' heads. Stamps' duty, 31 days, average 129.82 heads; with 132 heads, 30-49 days; extra arrastres work, 24-25 days. Duty done by stamps has been a trifle more than last month, and would have been greater, but some of them were stopped for five hours, as the water was turned off to fill two large holes in the side and bottom of Cristo's rego, at Boa Vista; the Susanna were stopped at one time for 10½ hours, for repairs to the wheel. The supply of water is short, and the rain which has fallen has not increased it permanently. The sinking of pits and bracket making, preparatory to working the two mines into one, interferes much and unfavourably, both as to quantity and quality of stone; and in order to throw out during the month 160's tons of barren killas, we had to take 51 tons from the old refuse heap. A great quantity of killas is coming up from the Bahia, and must continue to do so for a considerable time. The sanitary state of the establishment has been satisfactory.—Nov. 19: Gold extracted to date, 16,523 oits., from 1107.6 cubic feet of sand (result of 20 days' stamping), yielding 14.91 oits. per cubic foot, and 4707.2 tons of stone, equal to 3.51 oits. per ton. Of this the separation gives 539 oits., from 132.8 tons of stone, equal to 4.05 oits. per ton. This is a low produce, and does not promise well for the month. Stamps' working, 20 days, average 130.60 heads; with 132 heads, 19-79 days. The duty done is rather under the corresponding period of last month, in consequence of the rain having only a temporary effect in increasing the water supply. Stone has been short, and of inferior quality.

The United Mexican Mining Association have received despatches from the chief commissioner, dated Guanajuato, Dec. 14, and received *via* New York, of which the following are extracts:—

JESUS MARIA.—The work in the shaft has been deepened 7½ varas in the two weeks, and the frente de San Juan advanced 7½ varas; total depth of shaft, 100½ varas. I have ordered the drainage in the pozo de San Hilario to be re-commenced, by which I hope to drain the other two pozos of San Francisco and Dolores, and thus be enabled to speculate the vein in the latter, where ore of a good quality had appeared.

LA TRINIDAD.—The cross-cut San Rafael has advanced 7 varas in the two weeks, and is daily expected to communicate with the vein. The sale of buscones' ore was in the week ending Dec. 1, \$485, and for the week ending Dec. 8, \$735. In the current week no sale has taken place, in consequence of holidays, which in the form of saints' days cause us frequent interruption.

RAYAS.—In the two weeks which have elapsed since the last report this mine has been worked at a loss of \$512.

ALDANA.—I have considered it necessary to stop any further working in this mine for the present, confining myself to the works necessary to maintain possession in the adjoining territories of Santos Varones and San Luis Gonzaga.

The Imperial Brazilian Mining Association have advices dated Nov. 30. The Joinville's adit progresses most satisfactorily; and in six weeks or two months the more productive jacotings will be laid open, and the stamps regularly supplied with the same. The produce for the month was 5 lbs. 2 ozs. 7 dwt., showing a slight improvement over the preceding month.

The Copiapo Mining Company have advices to Dec. 1:—The returns from Chico Copper Mine for November had greatly increased in the yield of rich ore, the produce being 5150 qths., of six various qualities. The mine had considerably improved, there being a course of ore in the stopes in the bottom of the 30, 8 ft. wide, 34 to 36 per cent., and the 40 was approaching this deposit. In the 50, driving east of Harmones shaft, lode not so good as last reported, being 2½ ft. wide, 9 in. of which is rich ore. They were expecting to cut a good course of ore in the end of the 40 east, as they were getting under the course of ore in the 30. The stopes in the bottom of the 30 are looking splendid; lode 2 fms. wide, 8 ft. being or from 34 to 36 per cent. They had never seen a richer course of ore. In clearing up some old men's workings in the old part of the mine, they discovered a lode of ore, 15 in. wide, which will enable them still to raise a fair quantity of green carbonate ore.

The Royal Santiago Mining Company have advices from Capt. Tippett to Dec. 13:—At Taylor's, the lode in the engine-shaft, sinking under the 70, is 6 ft. wide, worth 2½ tons per fm.; the progress here is slow, owing to the safety-fuse being unfit for wet ground. Above the back of the 70 we have cut hitches, and put in a new set of timber; the lode in the 70 west is 7 ft. wide, worth 4 tons per fm.; we shall now commence to drive on the south, and leave the north. In the winze sinking in the bottom of this level the lode is 3½ ft. wide, worth 1½ ton per fm.; this place where the lode is visible; we have driven 6½ varas; the lode is narrow, but well defined. At Socorro, in level No. 2, we turned to the direction of the old workings, and cleared to the end; we found a large lode, but not in ore, which, though unproductive, is not uninteresting in appearance. This we believe to be the north lode we have in level No. 3. There has been some improvement in level No. 3, and we have holes to old workings, where the branch of ore is 7 inches wide. At Santa Cruz, nothing has been done. We have cleared the vega from San Jose from under the bush, and made a good road down the mountain side to join that from the village Complian. Mr. Humphreys, Capt. Ivey, and two men, have arrived; the former is about making some experiments on the ore, and is going to erect a furnace near the mines. There is some abundance of ore for this purpose, so there need be no delay. The south lode has improved, and will enable us to open up good ground for tributaries, as the branch, though narrow, produces very good ore.

The Fort Bowen Mining Company have advices to Dec. 22:—The gold

returned since the week ending Dec. 1 was 14 ozs. 3 dwt. 25 grs. The total weight of gold in Capt. Tregoning's possession was 37 ozs. 9 dwt. 1 gr. The Chilian Mill went to work on the 17th inst.; it worked well, and was likely to crush a great deal of ore. Only one of the lodes, west of Rio del Rey, had been seen; it gave a good sample of gold when washed. They were all in good health, and Capt. Tregoning did not hear of any sickness among the people.

The Nouveau Monde Mining Company have advices from their superintendent, Mr. E. Bray, to Nov. 30:—At San Pantaleon, in Cornubia shaft we have sunk 6½ varas; ground still hard. From this shaft we have communicated to the old workings, and put down a footway to Dolores level. In the side level we have driven 11½ varas. On the surface, we have taken up a level to the westward in this place where the lode is visible; we have driven 6½ varas; the lode is narrow, but well defined. At Socorro, in level No. 2, we turned to the direction of the old workings, and cleared to the end; we found a large lode, but not in ore, which, though unproductive, is not uninteresting in appearance. This we believe to be the north lode we have in level No. 3. There has been some improvement in level No. 3, and we have holes to old workings, where the branch of ore is 7 inches wide. At Santa Cruz, nothing has been done. We have cleared the vega from San Jose from under the bush, and made a good road down the mountain side to join that from the village Complian. Mr. Humphreys, Capt. Ivey, and two men, have arrived; the former is about making some experiments on the ore, and is going to erect a furnace near the mines. There is some abundance of ore for this purpose, so there need be no delay. The south lode has improved, and will enable us to open up good ground for tributaries, as the branch, though narrow, produces very good ore.

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The Mexican and South American Company have advices from Chil by the *La Plata*. From Herradura Smelting Works it is reported, under date Nov. 30, that there is a large stock of regulus waiting for a ship. From Tongoy Smelting Works it is reported that the stock of regulus has been shipped at Herradura. From Caldera Smelting Works it is reported, under date Dec. 1, that the *Araminta* had arrived on November 30 with coals, of which there was then a good supply, and it was expected the furnaces would do better work. Full supplies of ores, under contract, are now coming forward, and the company had ceased buying in the market. The *Ana Guimaraes* had finished discharging. The *Entugia* is discharging Chilian coals. A considerable stock of silver regulus is ready for shipment. Advices from the company's steamer *Anne* are to Nov. 30—all well. Since the last mail, no cargo of copper or regulus has arrived at Swansea.

MINING NOTABILIA.

GREAT SHEBA CONSOLS.—Capt. T. Richards, the agent of this mine, estimates the next bi-monthly sampling as rather over 200 tons. The lode is 18 feet wide, grey throughout, but of poor quality. The recent improvement was found in this lode on its north wall, and is looked on as a most positive indication of great improvement in depth.—*Callington*, Jan. 14.

DEVON COPPER AND SILVER-LEAD MINE.—We briefly referred to this adventure last week. The sett is one mile from north to south, and half a mile from east to west. The south part is decomposed granite, with a thin lode running through this part of the sett. The north part is of a light blue clay-slate killas. There are six lodes to be seen at the surface, of a very promising character, and five cross-courses or counter lodes, which, east and west, are expected to make great deposits of copper ore. The north and south lodes are composed of soft decomposed black killas, fookan, and mundic, yielding 18 ozs. silver to the ton; some portion returned 25 ozs. An adit is driven through the decomposed granite 20 fms. To the north of this adit a shaft is sunk 15 fms., where one of the copper lodes was cut, with a south underlay, carrying fine stones of ore. Driving about 5 fathoms through the cross-course, on the north part, they cut one of the copper lodes only 4 fms. below the road, a box of specimens of the ore has arrived in London, which we have inspected, and is certainly very rich for copper.

WHEAL CONSTANCE.—A company is in course of formation to work a silver-lead mine, under the above title, situate in the parish of Newlyn, near Truro, which will be divided into 1024 shares, at 17 per share, and will be conducted on the Cost-book Principle. Capt. Puckey, of St. Blazey, is the managing agent, and Mr. W. Charles, 27, Ainsliefarm, the secretary. The sett is held under a lease for 21 years, granted by the Bishop of Exeter and the Ecclesiastical Commissioners at 1-15th dues. Its area is three-fourths of a square mile, and the district prolific for silver-lead. East Wheal Rose, which has sold upwards of 600,000. worth of silver-lead ore, and divided nearly 300,000. among the adventurers, bounds it on the east, the Shepherd's Mines, extensively worked by the late Sir C. Hawkins, on the west, and South Carrigoll on the south, most of whose lodes pass through Wheal Constance. Wheal Arthur lode crosses at right angles six fms., giving as many important junctions, in addition to those formed by east and west with counter lodes. The soil being thus congenial for silver-lead, it is anticipated that, when properly opened, success will attend the working. The mine has been sunk 9 fms. below the 50 fathom level, and there is a 10 in. cylinder engine on it, with the necessary machinery and buildings, which are estimated as worth 2000. By the former adventurers, 10,310. was spent on explorations, including 1851, realised from ore raised. Capt. J. Puckey reported most favourably of the undertaking, and considers, with the proposed extension of capital, and the vigorous prosecution of the works, great advantages will be achieved.

We have inspected, during the past week, some very fine specimens of copper and gold ores from Chili, and, judging from their appearance, there would appear to be good reason to anticipate profitable results from the development of the property from which they were taken. We understand that, in order to raise the required amount of capital, a company is about to be formed. If this be done on a sound and equitable basis, and the management is such as will be the strictest scrutiny, it will be worthy the consideration of the English public; but we would recommend great circumspection before embarking in any undertaking where the field of operations is so far removed from the country in which the capital is subscribed.

The Waller Gold Mining Company have advices from their mines in Virginia up to the 23rd ult. The superintendent expresses his regret that he is still unable to inclose any returns of the stamping, owing to the severity of the frost, which has caused a temporary suspension of operations. The mill hands are, however, put to work at the shafts, and a large quantity of ore is being raised ready for the stamps as soon as they are able to be worked. The new set of stamping are entirely finished, and will be set up in a few days. The hiring of hands for the new year has been satisfactorily completed.

The Liberty Mining Company have advices from the Vaucluse Mine to Dec. 21:—Mr. Gregg had appropriated the money taken out by him to the payment of the debts, and was concerting with Mr. Seidell plans for future operations. He adds that the whole of the gold made has not hitherto been collected, for reasons which he will hereafter explain, but this loss can in future be remedied. That from experiments he has made, he has reason to believe that the sulphurates are very rich in gold, and anticipates from this source considerable returns to the shareholders.

The South Australian Copper Mining Company have advices from their manager, dated Strathalbyn, Sept. 13, stating that the *Switzerland*, with the bricks, timber, &c., and in about six or eight months hoped to have the fire lighted. The winter season would probably delay him in getting up to the mine the machinery which had arrived at Port Adelaide. He had, however, got it all at Adelaide in readiness, as soon as the drays could travel to send it up. He says he has cut down and timbered, and secured the winze to the north of Basset's shaft, so as to relieve the main shaft, while they are sinking there.

The Colonial Gold Company have received, by the *Ben Nevis*, advices from New South Wales and Victoria. The letters received from Mr. E. J. Spence, the company's superintendent in New South Wales, are dated from Louisa Creek to Sept. 29, 1855, and advise as follows:—

LOUISA CREEK: We have made but poor progress during the present month (September). After discharging the miners, and reducing our force and expenses in many ways, I still expected that we should have obtained a fair return of gold; but the constant succession of heavy rains have sadly interfered with our work, both in the quartz and alluvium. We have been driven out of the levels in which we were stowing, and all the holes sunk for the washing stuff have been several times filled. What we have reduced of the quartz has yielded more than the usual average, and some surface soil, which we have passed through the pug-mill, has given a paying return; but I am unable this month to send a return showing, as I hoped, that we were covering our charges. The pug-mill works admirably, and if we have fine weather during the coming month, and are at all fortunate in the stuff we raise, the result will be satisfactory. The returns for the month of August, as contrasted with July, show an increase of 107.2s. in the value of gold obtained, and that the expenditure had been 197.17s. 11d. less.

TAMBALOOBA: We have recommenced operations, and up to the present time have only passed about 40 tons under the stamps. At Mr. Bowden's suggestion, I have made some considerable alterations, and I believe improvements. He is very attentive to his duties, and so careful and patient in his experiments and trials, that I feel great confidence in his results. From the first parcel, we have obtained only about 1 dwt. per ton, but it appears that the bulk of this was drawn from a pile that had been raised out of a feeder of the vein, and which could hardly be expected to turn out well. We are now bringing down portions of all the piles raised along the course of the lode, the produce of which will enable us to form a correct estimate of the value of the large quantity of ore at grass. Within the next fortnight I shall be able to report to you with some confidence on this point. Pending some satisfactory return from this quartz, I have stopped all expenditure upon the vein; we are merely carrying down the ore which have already been raised at our expense.

BUANANDONG: The Bar has been fairly prospected; seven shafts have been sunk,

and tried in various parts. In the bottom of all these shafts the rock was smooth, hard, and black, with no deposit of gold immediately thereon. A little, in fine flakes, was disseminated through the washing stuff, but not nearly in sufficient quantity to pay. We found it about the same on the surface, and in different layers going down, which induced the expectation that the rock would be rich. As it was then perfectly clear that we had been mistaken, and as the operations on the river bed had only been sufficiently successful to justify the experiment that was tried, I immediately withdrew the men, and have since disposed of a portion of the tools and stores, and have, in fact, abandoned that enterprise.

From Victoria, the advices received from Mr. Comer are dated Sandhurst, Oct. 15.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—M. White, Jan. 14: The south part of the lode in the 20, south of Davey's engine-shaft, is worth for copper ore 29d. per fm. The north part of the lode, at this point, is worth for copper ore 6d. per fm.; and this the south part of the lode in driving east appear as though they will intersect, when no doubt a great change may be expected for the better. The lode in this level, west of cross-cut, is worth for copper ore 30d. per fm. The lode in the back over this level is worth for copper ore 5d. per fm. The lode in the winze sinking below the 60 is worth for copper ore quite 40d. per fm. We expect in about eight or nine days to communicate this winze with the rise. All other parts just as last reported.

BASSET GRAZE UNITED.—J. Rogers, Jan. 12: The lode in the 30 fathom level, west from engine-shaft, is improved both in size and quality; it is now full 3 feet wide, and will very well pay for driving, and do much better to be worked on tribute after the ground is cut out. We have nothing new in the 30 south. At Wheal Widden, the lode is much the same as when I wrote you last. I hope we shall be able to meet the whole of the cost in a month or two.

BEDFORD CONSOLS.—J. Hamby, Jan. 17: In driving east in the middle adit level we have cut a branch 1 foot wide, leading out from the cross-course, containing good stones of ore. We are driving on the east wall, and expect shortly to cut a good course of ore. The ground in the shallow level is favourable for driving; the lode is 2½ feet, yielding black and yellow ore. I expect a change in the end shortly, as we are approaching the ore down from the old men's workings.

BEDFORD UNITED.—J. Phillips, Jan. 16: The lode in the 130 fm. level east is 2½ ft. wide, worth from 2 to 3 tons of ore per fm. In this level west the lode is 3 ft. wide, looking very promising. The lode in the 115 west is 2½ ft. wide, producing 2 tons of ore per fm. In the same level east the lode continues to yield good saving work, and has favourable indications for an improvement. The stopes in the back of this level are worth 6 tons of ore per fm. Jackson's stopes in the 103 are worth 5 tons of ore per fathom. No alteration to notice in any other part of the mine since the last report.

BOLENOWE.—W. Roberts, Jan. 12: We have been obliged to suspend the sinking of the winze under the 20 fathom level, in consequence of having too much water to draw; the lode continues 3 ft. wide, producing mundic and ore. In the 30 west the lode is 4 ft. wide, with a promising appearance.

BORINGDON CONSOLS.—W. Godden, Jan. 17: We have commenced the cross-cut south of Annie's shaft towards the lode, and driven it 4 ft., which will intersect the lode about 75 fathoms from surface. The caunter lode in the 12 fm. end is looking very promising for a greater improvement, and we have occasionally saving work from the end.

BRONFLOYD.—J. Jones, Jan. 13: The engine-shaft No. 2 proceeds most satisfactorily, and the mine daily improves in value. The ore in pit continues to increase; the hard ground is dipping north very fast, and the more we cut south the better the ore becomes.

BRYNTAIL.—J. Ronch, Jan. 17: The 10 east, on new lode, reached the clay-slate yesterday; it dips east 4 ft. per fm. The lode against this is 14 in. wide, which promises little or none in the gritstone during the past week. I hope in my next to approach you of the lode being valuable in the clay-slate, which is congenial to lead. The winze sinking under the 10 has been poor for the last two days; we have now got down on the top of a vug, from which good stones of ore have been taken. The water that we formerly drew with a barrel is now going into it; this, apparently, has been accompanied by a change of ground, in which, no doubt, the lode will improve. The rise from the top of the stopes is now in the clay-slate, and produces about 6 cwt. per fm. per fm. The eastern part of the stopes continues the same as when reported on last week—viz., worth 20 fm. per fm. We have now about 10 tons of ore at surface.

BUTTERDON.—T. Grenfell, Jan. 14: During the past week we have discovered in the north end what has been long desired—viz., a pretty capel, in spar, mundic, and lead. Also on the east side of the level a dropper, or branch, composed of calcareous lime, decomposed felspar, and lead ore, inclining towards the lode in depth. Although the lode has not been taken down for the past week, the men, by blasting near it, broke off about a barrowful, which was all saving work, and shows a good squat of ore, so that the entire lode must now be saved. In the south end the lode is still divided; the western part of it is 1 ft. wide, composed of fluor-spar and lead ore, in sufficient quantity to pay for dressing. It is with pleasure I state that this level at present is, both in appearance and indications, above every thing I have before seen in the mine. We sold, yesterday, a parcel of lead ore, computed 7 tons, to Messrs. Locke, Blackett, and Co., at 19. 19s. per ton.—PENHAUER: We are still carrying on our operations at surface.

BWLCHISTELLAN.—J. Williams, Jan. 12: The shaftmen are still cutting a plat in the adit level, in order to sink the engine-shaft. This ground is opening on a very fine lode, filled with excellent gossan. We have two men driving the adit east, in beautiful prian and gossan. The smith and carpenter are preparing work for a new drawing machine.

CALSTOCK CONSOLS.—W. B. Colliom: On the south copper lode, the lode in the eastern end appears to be improving towards the bottom; the lode is 1 ft. wide, containing good work for copper. A pair of men are driving west of the cross-course on the north branch of the lode; from its bearing we expect it will unite with the south branch in a few fathoms driving, when a very productive lode is expected. The stopes in the back continue without alteration. On the north copper lode, in the western end there is no alteration to report this week, with the exception of the lode not being so large as it has been; in the eastern end the lode is at present poor for copper ore. The men engaged in stripping down the lode to the west of the cross-course have been breaking rich work for copper. The taking the ore to Calstock quarry for sampling has been suspended, and the masons and labourers are at work, getting the quarry belonging to the mine in order at Kelly Rock, so as to sample there, by which a considerable saving will be effected.

CALSTOCK UNITED.—W. Cooke, Jan. 12: In the 60 west we have taken down a few fathoms of the caunter lode the last few days, and have not yet got through it; it is composed of spar, with mundic, and strong spots of yellow copper ore. In the cross-cut north, in this level, the end is very hard and wet, and appears like the capel of a lode. In the cross-cut south the end is getting harder, but there is no particular change to report.

STATISTICS OF THE MINING INTEREST.

BY WILLIAM HENRY CUELL, ESQ.

TABULAR STATEMENTS, WITH RETURNS OF METAL, ON DIVIDEND-PAYING MINES, FOR THE PAST YEAR.

CORNISH AND DEVONSHIRE MINES.

| No. of Shares | Amount Paid. | Name of Mine. | Market Price. | Dividend per share. | Total Amount | Metal. | Parish. | Purser or Sec. | Address. | System. | Dividend payable. | Copper. | Tin. | Lead. | Total Amount of Money. | Lease granted. | Dues. |
|---------------|--------------|----------------------|---------------|---------------------|--------------|-----------------|------------------|-------------------------|-------------------------|--------------|-------------------|---------|------|------------|------------------------|----------------|-------------|
| 5120 | 2 11 10 | Alfred Consols | 17 | 1 3 0 | 5883 | Copper | Phillack | H. Noell | Hayle | Cost-book | Two months | 3483 | — | — | 29,350 0 0 | 1850 21 | 1-18 & 1-20 |
| 4000 | 2 15 0 | Bedford United | 10 | 1 9 0 | 5800 | Copper | Tavistock | G. Kieckhoefer | 50, Threadneedle-street | ditto | ditto | 2292 | — | — | 15,751 0 0 | 1841 21 | 1-15 |
| 200 | 91 5 0 | Botallack | 250 | 40 0 0 | 8000 | Copper and tin | St. Just | S. H. James | St. Just | ditto | ditto | 961 | 138 | — | 23,334 0 0 | 1841 21 | 1-24 |
| 1000 | 15 0 0 | Carn Brca | 80 | 4 0 0 | 4000 | Copper and tin | Redruth | F. Rochfort | 7, Queen-street-place | ditto | ditto | 6097 | 248 | — | 49,136 0 0 | 1841 21 | 1-15 |
| 2048 | 3 0 0 0 | Carnyorth | 4% | 0 9 0 | 322 | Tin | St. Just | W. Pierce | Penzance | ditto | ditto | — | — | — | — | — | — |
| 256 | 20 0 0 | Condurrow | 135 | 8 0 0 | 2048 | Copper and tin | Camborne | N. Vivian | Camborne | ditto | ditto | 1685 | 94 | — | 18,152 0 0 | 1845 21 | 1-20 |
| 1024 | 1 0 0 | Devon Great Consols. | 400 | 56 0 0 | 57344 | Copper | Tavistock | A. Allen | Gresham House | Joint-stock | ditto | 23167 | — | — | 131,294 0 0 | 1844 21 | 1-12 |
| 179 | 257 13 0 | Dolcoath | 110 | 6 0 0 | 1074 | Copper and tin | Camborne | W. R. Reynolds | Cost-book | ditto | ditto | 688 | 385 | — | 25,639 0 0 | — | — |
| 128 | 24 5 0 | East Pool | 160 | 10 0 0 | 1280 | Copper and tin | Pool | W. P. P. F. | Hloglan | ditto | ditto | 2294 | 40 | — | 15,981 0 0 | — | — |
| 2240 | 7 16 6 | Foxdale | 30 | 5 0 0 | 11208 | Lead | Isle of Man | W. Beckwith | Isle of Man | ditto | ditto | — | — | 2553 | 40,328 0 0 | — | 21 |
| 494 | 40 0 0 | Fowey Consols. | 39 | 2 0 0 | 988 | Copper | J. Davis | St. Blazey, Cornwall | St. Blazey, Cornwall | ditto | ditto | 5189 | — | — | 39,336 0 0 | — | — |
| 6000 | 2 10 0 | Great South Tolgus | 5 | 2 0 2 | 750 | Copper | H. and E. Crease | 50, Threadneedle-street | 50, Threadneedle-street | ditto | ditto | 605 | — | — | 3,731 0 0 | — | — |
| 6000 | 3 7 6 | Hington Down | 1000 | 7 1 7 0 | 8250 | Copper | R. Bowe | Liverpool | ditto | ditto | 3138 | — | — | 22,615 0 0 | — | — | |
| 29 | 100 0 0 | Laxey | 50 | 50 0 0 | 1000 | Lead | St. Just | H. Borrow | Truro | ditto | ditto | — | 900 | — | 18,900 0 0 | — | — |
| 160 | 2 10 0 | Levant | 120 | 6 0 0 | 960 | Copper and tin | St. Just | J. Secombe | Camborne | ditto | ditto | 1457 | — | — | 8,133 0 0 | — | — |
| 6000 | 4 10 6 | Marke Valley | 4 | 3 0 0 | 900 | Copper | Caradon | J. Woodmass | Camborne | ditto | ditto | 2318 | — | — | 10,135 0 0 | — | — |
| 6100 | 0 2 0 | Nether Hearth | 14 | 0 1 0 | 320 | Lead | Alston | J. Pascoe | 50, Threadneedle-street | ditto | ditto | — | — | — | — | — | — |
| 6000 | n. il. | North Wheal Bassett | 41 | 3 12 6 | 21750 | Copper and tin | Illogan | J. Davis | St. Blazey | ditto | ditto | 4539 | — | — | 45,420 0 0 | — | 21 |
| 6100 | 1 2 6 | Par Consols | 20 | 0 12 0 | 3840 | Copper | H. Kieckhoefer | 50, Threadneedle-street | 50, Threadneedle-street | ditto | ditto | 467 | — | — | 40,788 0 0 | — | — |
| 200 | 30 0 0 | Phoenix | 500 | 50 0 0 | 10000 | Copper and tin | Linkinhorne | T. Cross | Cornwall | Three months | 1367 | — | — | — | — | — | |
| 560 | 20 13 2 | Providence | 50 | 11 5 0 | 6300 | Copper and tin | S. H. Agnes | S. H. Agnes | St. Ives | ditto | ditto | — | — | — | — | — | — |
| 1000 | 15 0 0 | Polberro | — | 2 8 4 | 2417 | Copper and tin | G. Gwinne | 6, Queen-street-place | 6, Queen-street-place | Two months | 5 | 215 | — | 14,400 0 0 | — | — | |
| 512 | 12 0 0 | Rosewarne | 120 | 31 0 0 | 7936 | Copper and tin | St. Cleer | T. K. Kittow | Liskeard | ditto | ditto | 2531 | — | — | 23,142 0 0 | — | — |
| 236 | 2 10 0 | South Caradon | 300 | 45 0 0 | 12288 | Copper | St. Austell | J. Petherick | Marazion | ditto | ditto | 3886 | — | — | 41,806 0 0 | — | 1-18 |
| 128 | 19 0 0 | South Crinnis | 400 | 60 0 0 | 7680 | Copper | H. R. Michell | J. Cadby | Marazion | ditto | ditto | 1653 | — | — | 12,878 0 0 | — | — |
| 496 | 18 18 9 | South Frances | 380 | 45 0 0 | 19964 | Copper and tin | G. Kieckhoefer | T. Crouch | Marazion | Two months | 4569 | 20 | — | 44,333 0 0 | 1844 21 | 1-15 | |
| 9000 | 1 6 6 | South Tamar | 6% | 0 13 6 | 5700 | Silver-lead | Perranporth | R. Pierce | Marazion | Three months | — | 1325 | — | 26,274 0 0 | — | — | |
| 283 | 23 7 8 | Spearne Moor | — | 3 0 0 0 | 840 | Copper | St. Just | H. Kieckhoefer | Marazion | ditto | ditto | — | — | — | — | — | — |
| 2048 | 0 15 0 | Trehane | 4 | 1 0 0 | 2048 | Lead | T. Crouch | R. Pierce | Marazion | ditto | ditto | 7 | 51 | — | 3,375 0 0 | — | — |
| 96 | 32 10 0 | Tresavean | 150 | 12 0 0 | 1152 | Copper | St. Just | H. Kieckhoefer | Marazion | Two months | — | 5 | 215 | — | 9,114 0 0 | — | 21 |
| 4096 | 2 0 0 | Trewhethet | 3 | 0 4 0 | 849 | Lead | G. Gwynne | T. Crouch | Marazion | Three months | 3169 | — | — | 11,755 0 0 | — | — | |
| 400 | 40 0 0 | United | 250 | 9 0 0 | 3600 | Copper and tin | H. R. Michell | R. H. Michell | Marazion | ditto | ditto | 366 | — | — | 9,046 0 0 | — | 21 |
| 1024 | 8 5 0 | Wellington | — | 0 2 6 | 128 | Copper and tin | G. Kieckhoefer | J. Cadby | Marazion | Two months | 10300 | — | — | 55,883 0 0 | 1844 21 | 1-15 | |
| 6000 | 1 10 0 | West Bassett | 37 | 3 10 0 | 21000 | Copper | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | — | — | — | — | — | — |
| 236 | 20 0 0 | West Caradon | 140 | 17 0 0 | 4332 | Copper | S. H. Agnes | R. Pierce | Marazion | ditto | ditto | 7213 | — | — | 50,292 0 0 | — | — |
| 236 | 10 7 0 | West Damself | 80 | 10 0 0 | 2560 | Copper | T. Crouch | H. Kieckhoefer | Marazion | Three months | 3571 | — | — | 34,856 0 0 | 1840 21 | 1-16 | |
| 1024 | 5 0 0 | West Providence | 14 | 1 15 0 | 1792 | Copper and tin | St. Just | T. Crouch | Marazion | Two months | 1341 | — | — | 7,328 0 0 | — | — | |
| 400 | 38 10 0 | West Wheal Seton | 350 | 35 0 0 | 7000 | Copper | T. Crouch | H. Kieckhoefer | Marazion | Three months | 272 | 138 | — | 12,042 0 0 | 1840 21 | 1-18 | |
| 1228 | 7 0 0 | Wheal Arthur | 6 | 3 0 0 | 3684 | Copper | T. Crouch | H. Kieckhoefer | Marazion | Two months | 3064 | — | — | 21,206 0 0 | — | — | |
| 240 | 6 10 0 | Wheal Basset | — | 1 0 0 | 240 | Tin | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | 2674 | 6 | — | 11,639 0 0 | — | — |
| 512 | 5 2 6 | Wheal Bassett | 405 | 137 10 0 | 35200 | Copper | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | 7713 | — | — | 71,096 0 0 | 1850 21 | 1-15 |
| 236 | 5 0 0 | Wheal Buller | 600 | 130 0 0 | 33280 | Copper | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | 9693 | — | — | 57,835 0 0 | 1849 21 | 1-16 |
| 1024 | 3 15 0 | Wheal Charlotte | 10 | 1 10 0 | 1536 | Copper | T. Crouch | H. Kieckhoefer | Marazion | Four months | 893 | — | — | 6,881 0 0 | — | — | |
| 250 | 5 0 0 | Wheal Clifford | 570 | 5 7 7 | 1345 | Copper | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | 1651 | — | — | 12,938 0 0 | — | 21 |
| 5700 | 4 14 0 | W. H. Exm. and Adams | 8 | 0 2 6 | 712 | Lead and copper | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | — | — | — | — | — | 1-30 |
| 5000 | n. il. | Wheal Fortescue | 1 1/2 | 0 10 0 | 208 | Copper | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | — | — | — | — | — | — |
| 1024 | 1 7 2 | Wheal Kitty | 10 | 1 0 0 | 1024 | Tin | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | — | — | — | — | — | — |
| 112 | 79 0 0 | Wheal Margaret | 150 | 17 0 0 | 1904 | Tin | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | — | — | — | — | — | — |
| 512 | 7 15 0 | Wheal Mary Ann | 37 | 2 10 0 | 1280 | Lead | T. Crouch | H. Kieckhoefer | Marazion | ditto | ditto | — | — | —</ | | | |

down in the 30 end west this week. The other ends driving from this shaft continue to produce much as last reported.

NORTH WHEAL BASSET.—Capt. Thomas Glanville reports: That in the 72 fm. level the lode produced 1 ton of ore per fm. In the 62 there were stones of ore. At Grace's shaft, under the 52, the lode produced 4 tons per fm.; in the 52 west 2 tons; in the winze under the 52 north 8 tons; and in the winze under the 52 east 6 tons per fathom. In the 62 west 6 tons; in the 62, west of Mill's winze, 2 tons. In the 42, west of Grace's, stones of ore; in the rise in back of same, 4 tons; the stope in back of ditto, 6 tons; and in the 32, east of Grace's, 1 ton of ore per fm.

NORTH WHEAL BUSY.—S. S. Noell, J. W. Crase, Jan. 14: Painter's engine-shaft is sunk 2 fms. below the 22 fm. level, sinking at 117 fm. per fm.; we intend to continue the shaft perpendicularly, until we see the intersection of engine-lode with Harvey's lode, which we expect will take place at or about the 35, when we anticipate good results. The lode in the 22, east of said shaft, 9 ft. wide, composed of spar, with spots of copper ore, liming as it goes under the ore ground in the level above, driving at 47 fm. per fm. in the same level west the lode is 1 ft. wide, at present unproductive. The lode in the 16, east of said shaft, is 20 in. wide, worth 167 fm. per fm., driving at 37 fm. The lode in the stope in the back of the 16 is 1 ft. wide, worth 127 fm. per fm., stopping at 17 fm. The lode in the winze sinking below the adit level, before the latter-mentioned end (19), is 1 ft. wide, worth 17 fm. per fm., sinking at 47 fm., which is about 2½ fms. below the said level (adit). We expect to intersect Harvey's lode in the 10 cross-cut in about six days. The tribute department is much the same as for some time past. We sampled, on Tuesday, 37 tons of good quality copper ore.

NORTH WHEAL TRELAWNY.—H. Hodge, H. Harvey, Jan. 17: Coryton's engine-shaft is sunk 3½ fms. under the 56 fm. level. The cross-cut is extended west 12 fms. 1 ft. 6 in., where we have intersected the lode, and cut into it 4 ft. We have not seen the western wall; it is producing gossan, pyrite, quartz, and 9 cwt. of lead ore per fm. The lode in the 25, north of shaft, is 3 ft. wide, producing good stones of lead. In same level south it is 1½ ft. wide, producing stones of lead. In the winze sinking in the 13, north of the shaft, it is 2 ft. wide, producing 3 cwt. of lead per fm. The cross-cut driving east in this level is extended east of quarry lode 12 fms. towards Wheal Wrey lode. We have no change in the adit level east since last report; the pitches are producing much the same as usual.

NORTH WHEY CONSOLS.—W. George, of Wheal Venton, reports, Jan. 15: Having inspected this mine, in the parish of St. Ives, I beg to hand you the following report. I find that, in addition to the Bickton Consols Mine, you have a very promising piece of ground, which together make it an extensive set. It is situated to the north-east of Wheal Wrey Consols, and adjoining East Wheal Wrey. There are several known north and south lodes passing through it, one of which only has had any trial by the former workers; here an engine-shaft was sunk about 40 fms. from surface, but I am told the lode was not cut through at that level, but above this level there has been from 30 to 40 tons of silver-lead ores sold. There are three other lodes opened on to the east of this; on one there appears to have been an adit driven a short distance, the mouth of which is fallen in, consequently I could not see the lode, but from the nature of the stuff in the burrow, I should consider it to be a very promising one. I would now recommend you to clear this adit, when you will be able to judge better of it; and looking at the situation of the set, the different lodes running through it, I consider you have a promising one, which in my opinion is worth a spirited trial.

OKEL TOR.—W. B. Collier: The engine-shaft, sinking to a 50 fm. level, is progressing very favourably; in consequence of the improvement in the ground, the men are sinking at present 6 ft. a week. In the cross-cut south, in the 35 fm. level, the ground continues good for driving; in driving here a branch has been passed through, underlying south, carrying a dockan on its hanging-wall. In the cross-cut north, in the 35, from the distance now driven, we expect the main part of the large copper lode driven on in the 20. A pair of men are rising in the back of the 35, to communicate with the winze sunk below the 20.

OOA.—J. Stephens, Jan. 12: We have driven the adit level during the last fortnight about 3 fms.; the ground is now more favourable for driving, and the lode is of a most promising character. We have increased the number of men in the end to six, and are pushing on as fast as possible, and shall shortly get under the ore ground found at the trial shaft from surface. In the back of the adit we have four men stopping on copper ore, which we are raising at a profit to the shareholders. The copper ore, about 30 tons, is now ready, and will be shipped to Swannea on the 17th inst.

OSSEDD.—J. Trewethan, Jan. 16: The lode in the 40 fm. level is 4 ft. wide, very hard and unproductive, which obliged us to advance the price per fathom to 7d. The stope in back of the 30 are yielding about ½ ton of lead per fathom to 7d. The two cross-cuts in the 20, east of engine-shaft, are the same as last reported. The tribute pitches throughout the mine are looking just as usual, producing fair quantities of lead. I anticipate sampling 12 tons from this mine on our next sampling day.

PEEDAN-AN-DREA.—J. Delbridge, J. Carpenter, Jan. 12: At the 80 fm. level, west of engine-shaft, the sumpters are clearing towards Martin's lode. At the 80, west of Penrose's winze, on north lode, the lode is 2 ft. wide, yielding saving work for tin. The 80, east of engine-shaft, on Martin's lode, is cleared to the end, but we have not seen enough to report on the lode. The lode in the 68 west, west of the engine-shaft, on Martin's lode, is 2 to 4 ft. wide, yielding saving work for tin. The lode in the 60, west, on Martin's lode, is 6 ft. wide, worth 100 fm. per fm. In the rise west of engine-shaft, in the 55, on Martin's lode, the lode is yielding good saving work for tin. The lode in stope in back of the 68, on Martin's lode east, is 4 ft. wide, worth 251 to 301, per fm. The lode in the 68, east of cross-cut, on Great lode, is worth 127 fm. per fm. The lode in the 68, east of cross-cut, on Great lode, yields saving work for tin. There is no change in the ground, nor any appearance of a lode in the 55 cross-cut, north of engine lode. In the 40 cross-cut, south of Skinner's lode, toward Bragg's, the ground is favourable for driving. We calculate to about 12 fms to the south lode. Our tribute on Skinner's is as usual, and we are getting on as fast as possible with our surface works.

PEMBROKE AND EAST CRINNIS.—John Dale, G. T. Trewethan, Jan. 15: The ground at Reid's shaft is much the same as usual, and the men are sinking satisfactorily. No alteration of ground at Smith's shaft. The men have commenced to sink East Crinnis sump-shaft under the 134; the ground is very moderate. No alteration to notice in the 70 and 90 cross-cuts, or in any other part of the mines.

PEN-Y-GEILI.—J. Trewethan, Jan. 16: I cannot mention any alteration in the appearance of this mine since my last report, and unless an improvement takes place between now and our next setting we shall suspend the 20 east, and put the men to cut an east and west lode, known by the name of the Merlin lode, about 500 yards further west than the present working; the lode in the same level west is a little more cheering. The lode in the end at the Plantation shaft, driving north, is 3 feet wide, intermixed with limestone, carbonate of lime, and small spots of lead.

PERRAN WHEY GEORGE.—R. Davies, Jan. 14: The lode is about 3 ft. wide, producing good stones of copper ore, but we are not far enough east yet for the run of ore ground gone down in the bottom of the 20. However, as the ground is easy for driving, we shall not take long to get at it.

PRINCE ALBERT CONSOLS.—R. Davies, Jan. 14: The ground in the cross-cut is a little easier for driving than it has been for some time past, and a great deal of water oozes from it.

SILVER BROOK.—W. Hosking, Jan. 16: The ground in the engine-shaft still continues troublesome for sinking, in consequence of having a large broken course on the east side. The lode is about 7 ft. wide, with a strong mixture of quartz, carbonate of lime, and zinc, and producing good stones of lead ore. The 44 north has been driven 19 fms., and has yielded ore for 15 fms., worth on an average 97 fm. per fm. It has not been quite so good for the last 3 or 4 fms., being a little disordered by a slide, but we hope, from its kindly appearance, it will again shortly improve. The lode in the 44 end south is from 3 to 4 ft. wide, composed principally of spar, flockan, and saving work for lead and zinc ore, having a better appearance than for some time past, and the ground much fairer for driving. The stope in the back of this level are producing good work. The lode in the winze sinking below the 33 is without alteration, being about 3 ft. wide, and yielding some saving work. The lode in the 22 end, north of engine-shaft, is 5 ft. wide, sprung with lead throughout. The engines with all other machinery, are in good working order.

SORTRIDGE AND BEDFORD.—T. Treweeke, Jan. 16: The new shaft, on the copper lode, is improving in character for copper as we get deeper; it is composed principally of mudi, gossan, quartz, and flockan, with stones of very good copper ore. We have cleared the eastern end on the cross-course 30 fms.; this cross-course is 2 fms. big, at present composed of flockan, spar, and spots of mudi.

SORTRIDGE CONSOLS.—J. Metherell, Jan. 17: We have commenced to drive east in the 50 fm. level, but have not yet taken down any lode, nor has there been any lode taken down west. The men are still engaged about the shaft. In the cross-cut south, in the same level, we have intersected a branch or lode underlying north, composed of capel and ore. It looks well to see those droppers going into the lode in the 44 end south. The lode is impregnated with malleable all through the stope in back of same level, east of Bony's rise, is worth 7 tons per fm. The pitches in the back are much the same—good courses of ore. We are progressing with the clearing of the 20 as fast as possible. Nothing new in the cross-cut north at the 30. We are now progressing for the next sampling as fast as the wagons can take it away, which will be about 150 tons. We should have put in 200 tons if we could have drawn the ores to the surface.

SOUTH CARN BREA.—T. Grenville, January 12: Turret Setting.—The engine-shaft to sink and make complete to the deep adit by nine men, at 307 fm. per fm. At the flat rod shaft we have finished cutting platt; it will take about nine days from this time to fit the plunger-lift, and make all complete for sinking.

SOUTH CARN BREA.—John Dalbridge and E. Chegwin, January 14: The ground at engine-shaft, sinking below the 64, is hard, and our progress slow. In the 54 west the lode is 1½ ft. wide, producing 1 ton of ore per fm. In the 54 cross-cut south, towards the engine-shaft, ground spar for driving. In the 74, east of Gore's shaft, the lode is 2 ft. wide, yielding 1 ton of ore per fm. In the rise against Gore's shaft the ground is hard, and no lode taken down for the week. At Gore's shaft the ground continues hard. In the 64, east of Gore's, the lode is 2 ft. wide, yielding 1 ton of ore per fm. In the winze sinking below the 54 the lode is 2 ft. wide, yielding 2 tons of ore per fm. In the winze sinking below the 64, west of flat-rod shaft, the lode is 1½ ft. wide, producing 1 ton of ore per fm.

SOUTH DEVON GREAT CONSOLS.—J. Cock, Jan. 16: The lode at the engine-shaft is somewhat disordered, by means of small cross-courses passing through it; there is, however, scarcely any doubt but that it will soon prove to be a productive and valuable lode. In the end driving west, in the 37, the lode is about 1½ ft. wide, composed of gossan, and spar, intermixed with mudi, and spots of black ore. At a great distance from this point we expect to reach the junction of the granite and kyllas, which makes it a good speculation. Owing to the great increase of water in the winze, we have been obliged to change the small lift we had in use for a larger one. We are now making good progress in sinking; the lode continues about 3 ft. wide, producing occasional stones of ore and mudi; its present appearance warrants a spirited trial.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—W. Roberts, January 12: There is nothing particular new to notice in these mines, except in the 60 fm. level, driving north, where some particles of malleable copper have been found, which lead us to believe that a lode is not far distant.

ST. AUSTELL CONSOLS.—R. H. Williams, Jan. 12: On Monday we shall commence to drive the 25 fm. level cross-cut from Dawson's shaft. The 25 is nearly held to Young's from Dawson's shaft. At surface we are preparing floors for new stamps; the boiler of the new stamping-engine is fixed, and all the flues completed. The frost again prevents the masons from working; the carpenters are getting on well with their part of the work.

TAMAR SILVER-LEAD.—W. Robins, Jan. 14: In the 215 the lode is 3 ft. wide, and producing 16 cwt. of lead per fm. In the two stope in the back of this level the ground is rather hard for breaking; but, notwithstanding this, it can be worked

at a good profit, and during the past week the lode has improved, and the stope are now yielding on an average 1 ton of rich ore per fm. The 205 continues much the same as last reported. The lode in the 190 end is 3 ft. wide, and worth 18 cwt. per fm. As regards the stope, Nos. 1 and 2 fell considerably in the beginning of the week, from having made a splice; they are now, however, improving again, and are worth upon an average 1 ton per fm. No. 3 stope is yielding 1 ton 5 cwt. per fm.; No. 4, 1 ton 2 cwt.; No. 5, 1 ton; and the four remaining ones as usual. In the 175 the eastern lode, driving south, is 2½ ft. wide, and returning 13 cwt. per fm. The stope in the back is giving 10 cwt. per fm. The stope in the back of the 175 and 160 are also yielding favourably.

TAVY CONSOLS.—R. Williams: The lode in the 56 fm. level east is not so good as for some time past. The 68 east is poor; the lode in the same level west is improved in appearance and size. The lode in the 3, west is large and spotted with ore, but is of no value, yet promising. We have been obliged to suspend sinking the trial shaft in consequence of the water, but we shall resume it. We have been so unfortunate as to break down our drawing machine, which we find so much decayed as to require a new one, which will prevent our sampling at the usual time, as we cannot draw the ore. I propose therefore, to postpone the sampling for a month.

TEES SIDE.—W. Jeffrey, Jan. 11: The wheel is again stopped in consequence of frost, and the men are employed at Metal Band. The end driving east at this place a little improved, and ground looking very promising. At Providence, when the water was last out, we got the old pumps, and the shaft boarded down ready for drawing, and as soon as we get clear of water again we shall get some ore to surface.

TINCROFT.—W. Teague, J. Andrew, J. Trewethan, Jan. 12: North Tincroft.—At the new engine-shaft, sinking under the 142 fm. level, lode 3½ ft. wide, worth for tin and copper 107 fm. per fm. In the 142 driving west, lode 2 ft. wide, poor; in the 142 east, lode 3 ft. wide, producing saving work for tin. In the 130 east, lode 3 ft. wide, yielding 2 tons of ore per fm.; in the 130 west, lode 2½ ft. wide, producing stones of ore, but not to value. The rise in back of 90, east of Willoughby's shaft, is worth 107 fm. per fm. Highbrow lode, in 162, driving east of shaft, is 4 ft. wide, worth for tin 127 fm.; the 162 west, 4 ft. wide, worth for tin 307 fm. The 152, east of shaft, lode 2 ft. wide, worth for tin and copper 87 fm. per fm. In the 142 east, lode 3 ft. wide, worth for tin and copper 127 fm. per fm. Chapple's lode, in 140, driving west of downward shaft, is 2 feet wide, producing saving work for tin, but not to value. In rise in back of the 120, lode 3 ft. wide, worth 137 fm. per fm. for copper. In winze sinking under the 110, lode 3 ft. wide, worth for copper 237 fm. per fm. Our tribute department continues to produce a fair quantity of tin and copper: we calculate to sample on the 16th inst. from 700 to 800 tons of copper, and sell for the two months upwards of 30 tons of tin, which will leave, with the present price of tin and copper, a good profit on the two months' working.

TREHANE.—T. Woolcock, Jan. 14: The clearing of the adit cross-cut still continues favourable, and the stratum much mineralised, and congenial for lead ore, but no lode has yet been discovered. We have intersected several small branches within the last 2 fms. driving, and there is still water strongly issuing through the ground. I re-set the cross-cut, on Saturday, to four men, 2 fms. extent, at 37 fm. Kelly's engine-shaft is sunk 10 fm. below the 136. The ground at the shaft is not quite so favourable for sinking as it has been. I expect to make the communication with the winze in the bottom of the 121 by Wednesday, the 16th inst. The severity of the weather has much impeded our progress in dressing, but I hope to sample No. 2 parcel on the 26th of this month. The stope and pitches throughout the mine are much the same as usual.

TRELEIGH CONSOLS.—J. Prince, Jan. 12: In the 40, at Carr's, the lode in the west end 2 ft. wide, producing stones of ore, ground hard. The lode in the east end is 2 ft. wide, presenting the same appearance as it does in the eastern or old mine—contiguous to ore ground; but as this lode has been found to split into two parts in many places, and as the water is not yet let down in the 30, we are inclined to believe that we have not cut the whole of the lode, and we cannot do wrong by extending the cross-cut further north, inasmuch as Shanger, or the north lode, is before us, and the cross-cut should be extended to cut it, and this we propose doing at once. At Nicholson's, the lode in the 10 west is 3½ ft. wide, containing both tin and copper ore, worth 207 fm. per fm. The stamps are set at work, and the tinstuff will be reduced as soon as possible. In the western adit we have reached the Good Fortune lode, and have broken some fine stones of ore. Most of the backs are taken away as far east as we have reached; and we will endeavour to see the end of ground as soon as possible.

TRENEW CONSOLS.—The lode at the engine-shaft, sinking below the 80 fm. level is 2½ ft. wide, producing good stones of ore; the lode in the 80 end west is 1½ ft. wide, and will produce 1 ton per fm.; the lode in the 80 end east is 3 ft. wide, at present unproductive. The lode in the 70 end west is 1 ft. wide, and will produce 1 ton of ore per fm.; the lode in the 70 end east is poor. The lode in the 60 end east will produce 1 ton per fm.; the lode in the 60 end west is 3 ft. wide, and has a promising appearance. The lode in the 40 end, east of Astley's shaft, is 6 in. wide, poor. All our tribute pitches are as last reported.

TRETOIL.—R. Rich, Jan. 17: We sold 2½ cwt. of tin on Friday, the 11th, and hope to sell a similar quantity on the 25th inst., after which our sales will be monthly. The mine throughout is looking better than I have ever seen it before. **TREWETHA.**—W. Rose, Jan. 16: The cross-cut driving east, in the 50 fm. level, is extended 17 fms. in favourable ground. The lode in south end in this level (50) is 1 ft. wide, composed of fluor-spar and lead ore, producing about 6 cwt. of ore per fathom. In the 40, north end, the lode is yielding about 4 cwt. of ore per fm.; the stope are turning out much as usual. The sumpters are engaged making preparations to sink the engine-shaft below the 50. We sold on Saturday last to Messrs. Sims, Willyams, and Co., 38 tons of ore, at 287 fm. per ton. Our dressing, as well as all other surface operations, are much retarded by the severe frost.

VALE OF TOWY.—S. Thomas, T. Harvey, and S. Harper, Jan. 16: At Diagonal shaft, in the 40 fm. level, driving east, we are near the lode; we have bored into it about 18 in., and find no wall. In our next we hope to be able to give you more particulars respecting it. In the 30 north of shaft, the lode is 2½ ft. wide, worth 107 fm. per fm., and is producing about 7 cwt. of ore per fm. In the 40, north end, the lode is yielding about 4 cwt. of ore per fm.; the stope are turning out much as usual. The sumpters are engaged making preparations to sink the engine-shaft below the 50. We sold on Saturday last to Messrs. Sims, Willyams, and Co., 38 tons of ore, at 287 fm. per ton. Our dressing, as well as all other surface operations, are much retarded by the severe frost.

WALNUT CONSOLS.—J. Prince, Jan. 12: In the 120, at North Lode: The lode in the 80 fm. level, 2 ft. wide, worth 127 fm. per fm.; in the same level south it is 1½ ft. wide, worth 107 fm. per fm. In the 108 north it is 2 ft. wide, worth 127 fm. per fm.; in the same level south the lode is poor at present, being in disordered ground. In the winze sinking below the 108 it is 2 ft. wide, worth 107 fm. per fm. In the 98 south it is 1½ ft. wide, worth 107 fm. per fm. In the 98 north of Chippendale's, it is 1½ ft. wide, worth 77 fm. per fm.—South Mine: The water being in fork, Trelewyn's shaftmen have resumed sinking for bearers and cistern under the 130. In the 130 south the lode is 2 ft. wide, worth 107 fm. per fm. In the 120 south it is 2 ft. wide, worth 107 fm. per fm. The pitch near the 120 is 2 ft. wide, worth 107 fm. per fm. The stope and pitches are much as usual. We sold, yesterday, our two parcels of lead ore, sampled on the 5th inst.—viz., No. 1, computed 62 tons, to T. Somers, Esq., at 227, 12s. 6d. per ton; and No. 2, computed 28 tons, to Messrs. Newton, Keates, and Co., at 61, 1s. per ton.

WHEAL TREMAYNE.—R. Williams and J. Williams, Jan. 12: At Boundary engine-shaft, sinking under the 103 fm. level, there is no change to notice since last report; in the 103, east of the same shaft, on Allen's branch, the branch is worth 67 fm. per fathom; the stope in back of same level is worth 104 fm. per fathom. The stope in back of the 93, east of Allen's shaft, on Allen's branch, is worth 57 fm. per fathom. The stope in back of the 53, east of same shaft, on Allen's branch, is worth 67 fm. per fathom. At the new engine-shaft, on south lode, in the 70 west, the lode is 4 feet wide, chiefly composed of brint, flockan, spar, and mudi; at Field's shaft, on the same lode, sinking under the 40 fm. level, the lode is 15 in. wide, disordered and poor; in John and Bennett's winze, sinking under same level, west of shaft will turn out 1½ ton of copper ore per fathom. In the 40, west of West Whim shaft, on same lode, the lode is 9 in. wide, yielding occasional stones of copper ore. At flat-rod shaft, on same lode in the 70 east, the lode is 2 in. wide, disordered, yielding low-price tinstuff; the stope in back of same level, west of shaft, is 7 in. wide, composed of spar. The

At East Frongoch Mine meeting, on Thursday (Col. Croft in the chair), the accounts showed—Balance last audit, 70f. 17s. 10d.; calls, 275f. 34s. 17s. 10d.; Mine costs, July to Nov., 238f. 18s. 3d.; sundries, 76f. 17s. 10d.; leaving balance in favour of mine, 30f. 1s. 9d. A call of 1s. per share was made, and Messrs. Boyle, Cumberland, and Thomas, were re-elected the committee of management for the ensuing three months. A resolution was passed authorising the opening of an account at the Bank of London, in the name of John Cumberland and others. Capt. Thomas Pascoe reported that the cross-cut north had been extended to within 7 fms. 3 ft. of the plat; and, judging from the appearance of the ground, they thought they were near the lode. In driving through the 30 cross-cut south they had intersected and cut through the south lode, which is from 5 to 6 ft. wide, composed of sulphur, blonde, carbonate of lime, friable quartz, and a little lead, with a very promising appearance. The frost had set in, and the wheel was completely frozen, but as soon as the weather changes it would be most desirable to resume the 30 end east on south lode, from which they expected favourable results.

At the Esgair Mwyn Mine extraordinary general meeting, on Thursday (Mr. G. Holmee in the chair), the resolution passed on Nov. 16 last was confirmed, empowering the directors to raise, as circumstances may require, a sum not exceeding 2000*l.*, upon the debentures or bonds of the company, or upon mortgage of their mine, works, and property, in the manner and upon the terms that may be found by the directors most practicable. It was understood that part of the money raised would be required for the purchase of a neighbouring mine, when the mortgagees were in a position, by showing a clear title, to effect a settlement, and the residue only be called for as actually required to develop the eastern lode of Esgair Mwyn.

At Wheal Uny meeting, on Tuesday (Mr. P. L. Hind in the chair), the accounts from Aug. 31 to Nov. 30 showed—Calls received, 1024*l.*; tin sold, 170*l.*; copper sold, 523*l.*; 5d. 32s. 17s. 8d.—Balance last audit, 47f. 11s. 11d.; mine cost, Sept., Oct., and Nov., 1860*l.* 13s. 11d.; lord's dues, 115*l.* 10s. 6d.; merchants' bills, 664*l.* 1s. 2d.; sundries, 41f. 8s. 5d.; leaving balance in favour of mine, 123f. 11s. 8d. The estimate of assets and liabilities to Feb. 29 showed a balance against the mine of 416*l.* 2s. 2d. A call of 5s. per share was made. Capt. J. Rowe reported that in looking at their present circumstances they felt no hesitation in saying they were in a better state than they had ever been before; and looking at their prospects, they hoped to meet costs much nearer than they had done. The Chairman remarked that he had always entertained a very high opinion of the mine, and in their most trying times had never sold out; he had always purchased shares whenever he could, and had no hesitation in saying they had one of the best mines in Cornwall, and the day was not far distant when he would have the pleasure of meeting them with smiling faces, when they would have the satisfaction of receiving their first dividend.

At Wheal Harriet meeting, on the 11th inst. (Mr. A. L. Bellinger in the chair), the accounts showed—Calls received, 693*l.* 13s. 7d.—Balance against mine last audit, 185*l.* 15s. 6d.; mine cost, July and November, 294*l.* 15s. 3d.; merchants' bills, 53*l.* 8s. 9d.; sundries, 56*l.* 5s. 10d.; leaving balance in favour of mine, 117*l.* 7s. 8d. The estimate of assets and liabilities showed balance against mine, 122*l.* 1s. 2d., against which there are 23 tons of copper ore at surface. A call of 3s. per share was made, and Messrs. Cookney, Bellinger, and Mackay were elected the committee until next general meeting. Capt. J. Lyle reported that the situation of the mine, coupled with the fact that it had already proved productive at a shallow depth, warranted them in concluding that it will prove more productive when fully wrought. Little had been done to prove the mine, though no piece of ground was more worthy of being explored.

At North Hindington Mine meeting, on the 9th inst. (Mr. A. Samuel in the chair), the accounts showed—Balance last audit, 41*l.* 4s. 3d.; August calls, 160*l.*; proceeds of forfeited shares, 21*l.* 3s. 8d.—Costs, July and Oct., 116*l.* 5s. 2d.; shares forfeited, 27*l.* 4s. 9d.; printing, 4*l.* 3s. 3*l.*; leaving balance in favour of mine, 32*l.* 14s. 4*l.* The secretary was instructed to acquaint shareholders in arrear of call, that unless their arrears were paid forthwith proceedings would be taken against them by the labourers of the company for its debts.

At Kenneggy Mine meeting, on the 8th inst., the accounts for six months ending Nov. showed—Mine out, 239*l.* 17s. 7d.; lord's dues (1st-18th), 8*l.* 12s. 9*l.*; merchants' bills, 13*l.* 12s. 5*l.*—Balance last audit, 27*l.* 1s. 10*l.*; copper ore sold, 153*l.* 8*l.* 4*l.*; leaving balance against mine, 79*l.* 13*l.* 1*l.* A call of 2*l.* 6*l.* per share was made. Capt. J. White and S. Osborne reported that they had driven the adit east on the engine lode 17 fms. 1 ft., mostly through unproductive ground. At this point they intersected the dookan bearing north and south, which has heaved the lode out of its course, but to what extent they did not know.

At Copper Hill Mine meeting, on Wednesday, the accounts showed—Balance from last account, 890*l.* 0*l.* 11*l.*; costs, November and December, 73*l.* 11*l.* 8*l.*; merchants' bills, 876*l.* 12*l.* 8*l.*—Costs, July and Oct., 116*l.* 5*l.*—Calls, 1*l.* 1*l.*—By call, November 20, 128*l.* 0*l.* The sold (less dues), 31*l.* 5*l.* 4*l.*; leaving balance against the adventurers, 118*l.* 19*l.* 1*l.* A call of 5*l.* per share was made.

At North Roskar Mine meeting, on Monday, the accounts showed—Costs and merchants' bills for Sept. and Oct., 314*l.* 15*l.* 9*l.*; balance last account, 158*l.* 2*l.* 3*l.*; ore sold (less dues), 297*l.* 13*l.* 10*l.*; leaving balance against the adventurers, 3*l.* 19*l.* 8*l.*

At West Alfred Consols meeting, on the 10th inst. (Mr. G. A. Ashton in the chair), the accounts showed—Balance last account, 555*l.* 8*l.* 8*l.*; labour cost, Oct., 392*l.* 15*l.*; Nov., 380*l.* 0*l.* 1*l.*; merchants' bills, 309*l.* 6*l.* 3*l.*—Balance last audit, 10*l.* 1*l.* 1*l.* A call of 1*l.* 8*l.* 5*l.* per share was made. The purser was directed to proceed against all persons in arrear of call in the Summary Court. Capts. S. Lean and R. Stevens reported that the lode at the shaft was 2*l.* 6*l.* wide, with strong stones of ore. In the 7*l.* the lode is 2*l.* wide, 6*l.* in. of which is saving work for copper; in the western end it is 2*l.* wide, yielding 2 tons of ore per fm. The lode in the 6*l.* is worth 2*l.* per fm.; in the 5*l.* 6*l.*; and the stope in No. 1 is worth 3*l.* per fm. The mine was opening favourably, and the returns were expected to increase.

The Ivybridge Mine general meeting will take place at the mine on the 26th inst. This property is progressing well, and they had just assumed about 51 tons of silver-lead ore, produced chiefly from one pitch in the back of the 5*l.* These samplings will be considerably increased when the old shaft is completed to the 7*l.* which may be in about the period of a month; in the meantime, fresh discoveries are taking place in the ends driving. The meeting is expected to be a numerous one, and the balance-sheets satisfactory.

At the Algoed Slate Quarry meeting, on Monday (Mr. W. C. Black in the chair), some discussion arose on the advisability of continuing the operations, or winding-up for the time. It appeared that they were in debt to the amount of 600*l.*, and had only 5*l.* 19*l.* at the bankers, though the slate made and ready for shipment would more than cover their liabilities; but it was found impossible, from some unexplained cause, to find ships to convey it to its destination, notwithstanding it was all on order. The affairs of the company seem to have been greatly mismanaged, and it was said that at least 300*l.* would be required to bring the quarry into a remunerative condition. Mr. Gwynn suggested a call of 1*l.* per share, which would realise 600*l.*, and to bring the company under the Limited Liability Act. But it was ultimately determined to stop all expenditure, except that required by the terms of their lease, and await the report of the committee of investigation, on Friday, Feb. 1.

Trewetha, Keswick, Rhoswydol, and Dwyngwm, have sold lead ore.

Leeds Town Consols, Union Tin, Trefoil, Great Wheal Vor, West Wheal Jane, West Wheal Town, and Wheal Arthur, have sold black tin.

Sorridge Consols monthly sale has produced 1175*t.*, for 141 tons. We understand that the future samplings at this promising mine will be much increased, in consequence of the crusher having at last gone to work, and the question concerning the right of boundary being decided. The mine has recently been inspected by Capts. J. Richards and S. Seacombe, who not only verify the existence of sufficient reserves to justify the expectation of large samplings of rich quality copper ore being made, but also speak highly of its western prospects (in which direction the sett is very extensive), and the chances of the parallel lodes in process of being intersected from the lower levels.

Great Wheal Vor United Mines have sold 30 tons 8*l.* 8*l.* black tin, the result of three weeks and two days' working, producing 213*t.*, the highest price being 2*l.* 5*l.* per ton.

East Birch Tor Tin Mine (Dartmoor), during the last quarter, sold ores to the amount of 100*t.*

The first sampling of copper ore by the Great Wheal Busy United Mines took place a few days since: the quantity was 43 tons, and many pitches are already set, and ground still opening for more.

At East Margaret, they have an excellent improvement in sinking Curgenin's shaft below the 40 fm. level, which is now about down to the 90. A fine course of the came into the west end of the shaft, which is apparently the dip of tin from the 40 west, or a new bunch. At all events, it is a first-rate feature, and in 1*l.* sinking will be as good a lode as they had in the 40 west, judging from its present appearance.

At the Great Hewas United Mines, a good lode for tin has been found in the 76 fm. level, in the western part of the mine, which is likely to be of great importance to this property. Active measures are being carried out to reach the bottom of Northey's shaft, where there is said to be a good lode for tin going down.

At the Union Tin Mines, the new engine is working well. Tin ores were sold last week to the value of 157*l.* 10*l.* 4*l.*; another parcel was sold yesterday. There is a good lode for tin in the 10 fm. level west. The ground in the shaft is now very favourable for sinking, and it is expected that the 30 will be reached this week.

From Treloeweth Mine, the agent reports that in the engine-shaft sinking below the 90 the lode is 6 ft. wide, yielding 3 tons of copper ore per fm. In the 30 east the lode is 4 ft. wide, yielding 2 tons of copper ore per fm. In the 90 west the lode is 3 ft. wide, yielding 2 tons of copper ore per fm. In the rise in the back of the 30 west the lode is 2 ft. wide, yielding 1 ton per fm. In the 60 fm. level west the lode is 2 ft. wide, promising in appearance. The tribute bargains are set to 14 men, at an average of 3*l.* in 1*l.*

From Merllyn Mine, Capt. J. Trevethan reports that Brynrodd shaft is down between 5 and 4 fms. below the 30 fm. level, lode 5 ft. wide, poor. The 30 north has a promising appearance, occasional stones of lead ore. From the stope in the 30 he expected 4 tons of lead ore in the month. The winze under the 30 produces 8 cwt. of lead ore per fm., promising; from this part 5 tons are expected, and from the winze and pitches in the 40 south 4 tons.

From Ballyvirgin Mine, Capt. R. W. Smith reports that No. 1 stope, from No. 1 cross-stope, will yield 2*l.* 6*l.* tons of ore per fm.; No. 2 will yield 4 tons of sulphur, and $\frac{1}{2}$ ton of copper ore per fm.; the south stope 1 ton per fm. The lode in the bottom of the 10 fm. level is much clearer and richer than it was. He hoped to ship 30 tons of copper ore by next pay-day, and of the third quality he could ship 100 tons at once.

From the Carvath United Mines, the agent reports that the prospects continue good. In the 20 fm. level there is a good lode of tin in each end. The copper lode is not quite so good as it was, but still promising for depth. The tin lode, north of the copper lode, is 1 foot wide, good work. In the 10 fm. level they cut into a lode 10 ft. wide, containing tin.

From South Wheal Robert, Capt. T. Cocking reports that he carefully costed the sett, and found four east and west lodes, and a large euan course. Lode No. 1 is of a very promising character; No. 2 is a large champion lode, from 8 to 10 feet wide, strong cassiterite, gossan, prian, and spar; No. 3 is 2*l.* 6*l.* feet wide; and No. 4 is 2*l.* 6*l.* ft. wide. The three last are in a beautiful killas, congenital for copper ore. A cross-course, supposed to be that of North Robert, intersects these lodes. There is plenty of water-power for all surface purposes.

From Collacombe Mine has been inspected by Capt. W. Burgan, of Combustion, who reports the sett as extending one mile on the course of the lodes, and presenting a most favourable appearance. There are four well-defined lodes, all producing silver-lead ores, of good quality. They can all be worked without a steam-engine for some years, as the levels can be taken up from the sides of the hills. One lode has been opened on for 50 fms., producing profitable work at a very shallow level. A valuable and permanent mine is shortly expected.

At Tavistock United Mines, the new engine, which was started on Saturday week last by the engineer, Mr. W. Morshead, jun., Liskeard, works satisfactorily.

From Machynlleth, we learn that a novel feature in mining in that district occurred last Saturday, on the adoption of steam-power high on the hills. The Dwygwn Lead Mines have erected a steam-engine, which is the first in this neighbourhood. These mines have long wanted only additional power to what the water-wheel gave to enable them to be worked effectively. The neighbouring mines are watching with anxiety the result, and we should not be surprised shortly to see steam-towing off among the hills as it does in manufacturing districts, the great obstacles Welsh mines have to contend with being frost in winter, and drought in summer.

Three Irish mines are now in course of dissolution under the Joint-Stock Companies' Wind-ing-up Act—the Mizen Head Copper Mining Company, the Laxmore Mining Company, and the Royal Hibernian Mining Company. In the latter, the petition was presented to the Lord Chancellor in Ireland by Mr. J. M. Hoare, of Blesington-street, Dublin; and the Laxmore petition by Mr. John Elliott, of Thomas-street. Mr. Michael Larkin is the solicitor acting in each case.

From Clogau Gold Mine, some very rich ore has been raised, and shipped to Liverpool.

At the Prince of Wales Gold Mine, the workings are progressing in a most satisfactory manner.

At the Dolfrwynog Gold Mine, visible gold ore is being found daily, and three out of the six crushing pans are at work.

At the Cambrian Gold Mine, No. 6 lode is being worked, and some rich gold ore has been raised.

The Voel Ebie Silver-Lead Mine continues to improve from the sink in No. 1 level. The dressed lead has been assayed by Mr. Byers, of Dolgelly, who returns 8 ozs. 11 dwt. of fine gold, and 11 ozs. of silver to the ton. The stope in No. 2, level are producing 30 cwt. of ore per fm. The lode in No. 4 level is 4 ft. wide, producing 30 cwt. of ore per fm.

The Glaston Mine has 50 tons of copper ore ready for sampling.

At the Upper Glaston Mine, a discovery of copper ore, similar in character to the Glaston, has taken place.

At the Raglan Mine, some fine copper ore is being raised and dressed on tribute, at 10*l.* in 1*l.*

At the Cwmheisian Issa Mine, the works are being carried on with vigour. The lodes still continue very poor.

Several new mines in the neighbourhood of Dolgelly are being opened.

During the week, shares have changed hands in the following:—

Dividend Mines—Alfred Consols, Bedford United, Botallack, Carvannal, Cilgwyn, Cwm Cwm Brynwyd, Conduro, Devon Great Consols, Dolecath, Gonamena, Great Polgoon, Great South Tolgus, Hington Down Consols, North Pool, North Wheal Bassett, Par Consols, Phoenix, Rosewarne United, South Cadron, South Tolgus, South Wheal Frances, Tamar Consols, Tincraft, Trechane, Trewhella, Trewetha, United Mines (Gwynedd), Vale of Towy, West Bassett, West Cadron, West Damsel, West Penrhyn, West Wheal Seton, Wheal Arthur, Wheal Bassett, Wheal Buller, Wheal Cliff-ford, Wheal Friendship, Wheal Kitty (Lelant), Wheal Margaret, Wheal Mary Ann, Wheal Seton, Wheal Tremayne, Wh. Trelawny, Wheal Wrey, General Mining Company for Ireland, Mining Company of Ireland.

Mines which have sold Ores—Ballyvirgin, Bell and Lanartha, Bolling Well, Buller and Bassett, Bryntai, Cargol, Carnewas, Carvannal, Cilgwyn and Wentworth, Crow Hill, Cwm Darren, Devan Wheal, Eaglebrook, East Bassett, East Buller, East Gunnis Lake, East Tolgus, East Wheal Rose, Gilmar, Great Sheba Consols, Grambler and St. Aubyn, Great Wheal Alfred, Great Wheal Baden, Hawkmoor, Ivybridge, Llwyn Bodrhyd, Mill Pool, North Buller, North Frances, North Wheal Croft, North Wheal Robert, North Wheal Trelew, Padarn-drea, Rosewarne and Herland United, Sartridge Consols, Sartridge and Bedford, St. Day United, Stray Park, Trewharsh, Trefoil, West Alfred, West Fowey Consols, West Sotridge, Wheal Capid, Wheal Edward, Guskus, Wheal Hender, Wheal Kitty (St. Agnes), Wheal Langford, Wheal Trehidy, Wheal Trebus, Wheal Zion.

Mines which have not sold Ores—Clowance Mines, Frank Mills, Great Sotridge, South Buller and West Penrhyn, South Rosewarne, Wheal Grenville, Wheal Pollard.

In Foreign Mines, the market has been more active throughout the week, and prices well maintained. Transactions were effected yesterday in National Brazilian at 2*l.* 1*l.*; St. John del Rey, 28*l.*; Linares, 7*l.*; and United Mexican, 4*l.* On Monday, National Brazilian changed hands at 2*l.*; St. John del Rey, 27*l.* On Tuesday, Imperial Brazilian were officially marked at 2*l.* National Brazilian, in consequence of the unfavourable advice, experienced a great fall, being done this day as low as 1*l.* 1*l.* Clarendon Consolidated Mining Company of Jamaica, 5*l.*; Cobre Copper, 69*l.* to 69*l.*; Royal Santiago, 3*l.*; United Mexican, 3*l.* On Wednesday, Great Royal Santiago, 3*l.*; Cobre Copper were firmer, changing hands at 7*l.*; Royal Santiago, 3*l.*; United Mexican, 3*l.* On Thursday, the only transactions were in Marquita, 5*l.*, and United Mexican, 3*l.*

At the English and Australian Copper Company meeting, on Thursday, a proposition was made by Sir Wm. Foster to purchase the company's property in this country, in consequence of their having failed to obtain the additional capital required by the issue of debentures. After a stormy discussion, it was agreed to accept 50,000*l.*, without valuation. The proceedings, which terminated with a vote of no confidence in the Chairman, are detailed in another column.

At the Wheal Jamaica Copper Company meeting, held at Kingston, on Dec. 21 (Mr. R. J. C. Hitchins in the chair), a very encouraging report was read and adopted. The company had begun to raise ore, and the agents reported that the stope in the back of No. 2 level were yielding between 1 and 2 tons of rich ore per fm. A specimen of ore from these stope, weighing 3 cwt. 0 qr. 20 lbs., was exhibited at the meeting, and gave great satisfaction. The agents also reported that the lode in the 50 was turning out some fine yellow and peacock ore, mixed with native copper, and was improving every hour. The amount available to the company on Nov. 30 was 484*l.* 12*l.* 3*l.* in the hands of the bankers, and 193*l.* 2*l.* 3*l.* on the 20th, which is the month of February. The disposal of 5000 additional shares, which would be all taken up by present shareholders, would supply the means of carrying on the undertaking to the end of June, by which time it was expected that the mine would be in a condition to contribute to its own expenses. Of first quality ore 14 tons had been shipped, the last lot realising 2*l.* 1*l.* per ton in Liverpool. There were about 5 tons of ore of the same quality, and between 30 and 40 tons of second quality, at the mine.

The Imperial Brazilian Mining Association have submitted samples of the ore sent home by Capt. Treloar, from the estate of Antonio Perera, for analysis, to Prof. Ansell. The following is an extract from an elaborate report of the eminent professor at the Panopon:—"At your request, I have examined the specimens of gold ore

Notices to Correspondents.

Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

ALUMINUM.—SIR: In your last Journal, it is stated that this metal, in its "melted state, weighs 2.50; and cold, 2.67." This is "beyond me" (as I said to Mr. Michael McKiernan last week, about chloride of silver). Taking specific gravity with "melted" metal must have required prodigious pressure on the water, and which should have been red-hot. It surely must be an error. I tried this substance a few weeks since, and make it 2.52, and sent this return of its specific gravity to my old friend, the editor of the *Literary and Scientific Register and Almanac*, from whom I received a specimen of the metal.—ROBERT W. BYERS: *Douglas, Jan. 14.*

SIR:—Can any of your correspondents inform me if Mr. Stagg's patent for condensing smoke, containing metallic substances, is yet in existence, and whether it has met with success? I should also be glad of Mr. Stagg's address.—H. H.: *Jas. 11.*

MINE MANAGEMENT.—SIR: I was glad to see the remarks of "G. S." in your last Journal; for, though not connected with Ivybridge Mine, and quite unknown to Mr. Murray, I consider the suggestion of appointing a delegation of London shareholders to pay a visit of inspection and examination, previous to meetings, one deserving general adoption. I hope the proposition of "G. S." will be fully carried into effect, and that its result may prove as successful as the writer anticipates; then, I feel assured, whether a testimonial be presented by the Ivybridge proprietor or not, that many interested in Mining will look with very different feelings towards Mr. Adam Murray and his friends to those too generally entertained towards the originators of some modern mining undertakings.—AN INVESTOR: *Egremont-park, Jan. 18.*

COCHINER'S QUARTZ CRUSHING MACHINE.—"Gold" (Lothbury).—We understand that this machine still remains at the works recently occupied by the British and Colonial Gold Company, at Butherford.

WE CAN DO WITHOUT STAMPS FOR GOLD QUARTZ.—SIR: Last week Mr. Calvert left with us some lumps of the Cambrian gold quartz, which he had operated upon by his process; it was perfectly hard, and no gold visible, and we could not conceive that the desired object had been obtained, especially when he assured us he had done with it. We placed it upon the shelf of a lock-up recess; in three days' time the want of some papers caused me to unlock the book-case, when, to my great astonishment, I found the quartz had all tumbled to pieces, I examined it closely, and some lumps which still seemed to retain their original shape crumbled in my fingers, and revealed minute aggregations of metallic gold. I washed it with a dish in my hand-basin, and obtained a very pretty result; this is most likely what Mr. Calvert calls copying Nature's process. The method is a secret at present, but cannot remain so long, as Mr. Calvert has applied for a patent.—A CITY MERCHANT: *Jas. 11.*—[The same result occurred to a specimen left by Mr. Calvert in our office.]

"Inquirer" (Cannon-street).—The circular signed by the four Cornish Members of Parliament, Sir Charles Lemon, T. J. Azar, R. Barnes, N. Kendall, and Michael Williams, and announcing that they had withdrawn the bill introduced by them in the last session, will be found in the *Mining Journal* of July 7 last. In it they state there was not the slightest difference of opinion among them as to the propriety of the principle of rating lords' dues; but there were difficulties in carrying it out, which induced them to withdraw it.

We cannot give opinions respecting the desirability of embarking in any particular mines. "Modus" must, therefore, make enquiry of some respectable mine broker or agent.

TRENEW CONSOLS, AND ITS ORIGINATORS.—SIR: A letter, landatory of the virtues of Messrs. Cartwheel (father and son) appears in a prominent place in your last Journal, with a denunciation of the late change in management. If this letter is not the composition of one of the above persons, it does not come from one who has experienced anything of the conduct of the parties he refers to as a Trenew shareholder. The limits of a letter would be far exceeded were I to exhibit it as it deserves—it must, therefore, be sufficient here to say that nineteen-twentieths of all the shareholders not interested in mine supplies have approved the change, and continue by letter to the present committee to express their sentiments of the manner in which the concern was conducted, and reported upon by them. Should any of the public wish to know more on the subject, I hand you my name and address.—A LARGE SHAREHOLDER.

DUSTON IRON OX COMPANY.—SIR: What can possibly possess the present directors of this company (if they mean honestly) not to wind up this unfortunate affair at once? For what is the use of clinging to the futile hopes which were held out at their meeting on Nov. 8? Through your valuable Journal, I earnestly call upon the shareholders to insist upon their doing so without further delay, if they will not without being compelled.—A LOVER OF TRUTH, AND A SHAREHOLDER: *Jas. 15.*

GOLD EXTRACTION.—SIR: I think you have been very considerate to the "would-be gold extractors" during the last few years: it is time now to realise what they have promised to do; if they cannot do so, the sooner they disappear from the columns of your useful practical Journal the better. Allow me to ask those gentlemen who pretend to know so much of gold extraction whether any of them (excepting Mr. Hopkins) have been engaged in the business in a practical manner!—that is, whether they have reduced a few hundred tons of gold ores in a commercial and profitable manner in any gold mine? The general impression is, that they are mere tyro assayers and experimenters, who have taken advantage of your kind liberality and the credulity of the English public, and that it is high time to bring such things to an end. If there be a real practical man amongst them who has so treated gold ores on a large scale, your readers would be happy to know his opinion on the best mode of extracting gold. It appears that experience has proved, since the commencement of the English gold companies in the Brazils, upwards of 30 years ago, that stamping and washing, with and without amalgamation, have been found the best. I wish to know whether any one of your correspondents have found a better and simpler means? If not, why occupy your valuable columns in useless discussions on the subject?—A SUBSCRIBER.

"T. C. B." (Gloucester-place).—The shares having been paid up are liable to no further calls. If there be not sufficient capital to carry on the undertaking, the most advisable course to pursue would be to wind up. It appears that, so long as the present committee are connected with the management, no desirable results will be arrived at. From the antecedents of these gentlemen, the shareholders have but little confidence in the propriety of their proceedings, and the property is not well known in the market.

GREAT CANTERBURY.—NEW SOUTH WALES COAL.—SIR: What course ought the shareholders to pursue in the present winding-up of this concern in the Court of Chancery? What are the intentions of the shareholders and committee of management of the New South Wales Coal Company? There was some talk a short time ago of proceedings being taken against the directors for the recovery of the deposits.—VERA: *Jas. 16.*

GREAT WHEAL BUSY (LIMITED).—SIR: If the correspondent from Chacewater expects his questions answered, he must address his communications to me, when he will obtain all necessary information.—R. C. MANUEL, Sec.: *Jas. 18.*

ADELAIDE LAND AND GOLD COMPANY.—SIR: In looking over your Journal I observe a letter on the affairs of this company, signed "A. M." wherein is related the adventures of an acre of land in the city of Adelaide, which having been purchased in the first instance for a few shillings, has, after the lapse of a few years, passed through various hands at increasing rates, until at last three-fourths of it was sold for 18,000*£*, and the remaining fourth being about to change hands at the rate of 32,000*£* per acre. "A. M." may well say that this land is in the best situation in Adelaide; but would he condescend to further enlighten me, who am rather sceptical, about the matter, and state in what part of Adelaide this valuable piece of ground is to be found; and I will greatly oblige one who knows something about that interesting and very prosperous portion of the globe.—COLUMBIAN: *Jas. 16.*

RED DRAGON MINE.—One of Perkes's gold crushing machines was erected on the mine; but, from the difficult nature of the country, we are informed that it will scarcely pay for the carriage as old iron. About 120*t*. of mercury was put in to make an experiment, but the whole escaped, and was afterwards found in the valley, a considerable distance from the works.

RATING OF MINES.—"Adventure" (Bodmin).—The rating of mines and dues has al ways been a difficult question, even previous to 1832, when the lords paid rates on their dues; before it was decided in a court of law that the reservation of a money payment rendered them exempt, a great discrepancy prevailed in parishes situated in groups in the mining districts. For instance, in one of these, consisting of 14 parishes, when that year Bullock paid 1*l*. 1*sd*. in 1*l*.; Falmouth parish, 1*l*. 5*sd*.; Falmouth town, 1*l*. 9*sd*.; Mayman, 2*l*.; Constantine, 2*l*. 3*sd*.; St. Ives, 2*l*. 6*sd*.; Mylor, 2*l*. 7*sd*.; Mabe, 2*l*. 9*sd*.; Helston, 2*l*. 10*sd*.; Penryn, 3*l*. 9*sd*.; Wendron, 4*l*. 0*sd*.; Stithians, 1*l*. 2*sd*.; Perran-arworth, 1*l*. 3*sd*.; and Gwennap, 3*l*. 0*sd*. In the latter, in the event of the lords' dues being exempt, would have been a burthen of 420*£* on a rental of 6000*£*. a year.

ATE MARIA COMPANY.—MR. O'CONNOR has not yet returned to England, nor have we heard of the arrival of the quartz which it was stated was shipped by him, for the purpose of being crushed in this country. The funds have long since been exhausted, and though the committee of investigation have been appointed for more than 12 months, they have as yet published no report.

ADELAIDE LAND AND GOLD COMPANY.—SIR: I was glad to see a notice of this apparently ill-fated concern in your last Journal, and I do hope that the call on the officials for information will not pass unanswered. There are some gentlemen connected with the management far too honourable, I feel assured, to allow even a suspicion of their intentions to obtain currency without at once causing it to disappear by the fullest explanation of their conduct. They can never remain silent, while not only the fact of the company being involved in an expensive Chancery suit is patent to all, but a pretty general rumour of dissensions among the members is being circulated. Why should the directors hesitate in publishing the state of their affairs, or of assuring the shareholders that the management is progressing satisfactorily, under the guidance of a united board, and the fostering care of an intelligent and painstaking *governor*? The price of the shares on the market I take to be no criterion of the value of our property, in which I embarked for investment, and not for jobbing purposes.—ONE INTERESTED: *Cornhill, Jan. 16.*

SOUTH TAMAR MINE.—We are informed that 150*t*. was advanced in order to make the dividend of 5*sd*., so that there might be no deviation in the amount, as the estimated accounts of liabilities and assets fully warranted that course—the produce for the next two months showing a good balance after the payment of a 5*sd*. dividend.

BRITISH MINES CONSIDERED.—SIR: I think it is unfair of your correspondent, "E.," to select Mr. Murchison for his remarks on the non-realisation of the results promised. There are two or three other reviews which have proved equally fallacious in their predictions, and equally dangerous to those who are so foolish as to be guided by them. Why not embody the whole of the Review, and then show the great disparity of the results, as compared to the heavy losses incurred in the unproductive British mines!—VINDEX.

WEST WHEAL PROVIDENCE.—SIR: Mr. Watson, in his account of British Mining for 1855, published in your Journal of Dec. 29, falls into an error with regard to West Wheal Providence, the dividends of which he states to be 25*sd*. per share for the year. West Wheal Providence in 1855 paid a dividend of 10*sd*. in April, 10*sd*. in July, and 15*sd*. in October. There is another of 15*sd*. for the three months ending Nov., 1855, payable the 14th of this month. I find, therefore, that 35*sd*. have been paid, and 15*sd*. in addition, earned in 1855. But, as the first dividend was on four months' working, including the two last months of 1854, we must deduct 5*sd*. from it—thus 45*sd*. per share have been earned as dividend in 1855. Besides this, during the same period, a surplus, or reserve of above 500*£*. (equal to a 10*sd*. dividend) has been accumulated, so that the total profits in 1855 were in reality 55*sd*. per share. As Mr. Watson is, I am aware, desirous that his account should be accurate, I beg your insertion of this correction, as a matter of justice to him and to the mine.—A SUBSCRIBER: *Jas. 18.*

HEMATITE ORES.—SIR: I observed in your Journal a short time back, some remarks by "An Ironmaster," respecting the use of hematite ores in Staffordshire. Would he kindly favour me with some particulars as to the source of the hematite ores, and at what particular works they are used, or any other information bearing upon new discoveries of minerals or improved processes of smelting? I have read Mr. Blackwell's paper; but as "An Ironmaster" is residing in the mineral districts, his information will probably be more recent.—INQUIRER.

IMPOSTS ON LEAD MINES.—SIR: Can you inform me what deductions are usually, and may be fairly, taken from the proceeds of a parcel of lead ore, the mine being Crown property, before calculating the excessive royalty of 1-10*th*; and whether interest subtracted by consignees is not considered as one of the deductions allowed?—INQUIRER: *Clapham, Jan. 17.*

RESOURCES OF CEYLON.—SIR: Can any of your readers inform us where a letter will find Capt. C. W. Payne, author of a small work on Ceylon, and connected with the Ceylon Land and Mining Company?—FLETCHER AND CO.: *Leeds, Jan. 17.*

"Inquirer" (Liverpool).—The iron manufactured in Sweden is principally made with charcoal. Pig-iron for castings, exported from this country, is used in nearly all the foundries on the sea board, it being obtained much cheaper from here than it could be manufactured there. The Swedish pound avoirdupois is somewhat heavier than the corresponding English weight. It is calculated that six Swedish skippunds are equal to a ton.

BRITISH SPELTER.—SIR: Your remarks in last Journal on British spelter are, I think, calculated to create an unfounded prejudice against that article. I have been a smelter of zinc ores, both sulphurates and carbonates, for some years, and have never used an ounce of "refuse galvanized iron." I am now, and have for some time since been, obtaining 24*l*. 10*sd*. per ton for the metal, and which will bear comparison with any, either foreign or British, brought into the market. Will you allow me to suggest the desirability of giving the quantity of zinc ores raised and sold at the various British mines as you do of lead, with prices and names of purchasers?—A SMELTER: *Jas. 16.*

KNOCKTRELLANE MINING COMPANY.—This association has been wound-up; operations have been suspended for more than 12 months. The secretary was Mr. Francis Stokes, who will, no doubt, be able to afford all information regarding the affairs of the company.

QUARTZ ROCK GOLD MINING COMPANY.—The annual meeting of this company is held in March. Advises are expected from the superintendent, Mr. Wadell, by the next mail. We understand that, previous to the general meeting, the shareholders will be summoned, for the purpose of electing directors in lieu of Lord Erskine and Alderman Kelly, deceased.

"J. F." (Moorgate-street).—The mines were never properly tested; the expenditure was both reckless and extravagant. Incompetent agents were selected, without any other qualification than that of being connected with some of the directors. The secretary was totally unacquainted with details, and obtained his situation through nepotism, and, as may well be supposed, the shareholders have had to lose the capital they embarked in this undertaking. Such instances are by no means rare, and until adventurers take measures to protect themselves, they will not be infrequent. Occasionally exposures take place, and the evil is remedied for a brief period. These, however, are soon forgotten, and the old system is again reverted to, with the same deplorable results.

GREAT WHEAL BUSY (LIMITED).—SIR: I see by the last Number of your valuable Journal that Mr. R. C. Manuel, of 47, Old Broad-street, proposes to answer a public enquiry upon matters of the most vital importance to this undertaking, upon application being privately made to him. My object is a public one—that the mine should be properly worked. But, where is the money?—A SHAREHOLDER: *Chacewater, Jan. 16.*

SALE OF MINING SHARES.—SIR: The article last week by "Junius" so completely exposes his character as a sharebroker, that it is unnecessary to trouble you with a lengthened communication. Any party who attends the sale of shares by auction, must be satisfied that the statements of "Junius" are most self-blah. Why should not mining, as well as railway shares, and freehold and leasehold property be sold by auction? but such a course does not answer the profession of "Junius." The auctioneer, in the most fair manner, invariably states whether he has a reserved price; and I find by your columns, that it is always stated when a lot is passed or bought in. If such be the case, what is the object of "Junius'" remarks, except to serve him as a broker and jobber?—ONE WHO ATTENDS THE SALES BY AUCTION: *Jas. 16.*

A VIS IMPORTANTE.—MM. les Gérants et les Secrétaire des Compagnies de Mines et des Sociétés Industrielles qui s'occupent de la Métallurgie, sont invités à communiquer, au correspondant du *Mining Journal*, les détails de leurs travaux. MM. les Éditeurs sont prévenus qu'en rendant compte de tout ouvrage se rapportant aux Sciences métallurgiques, dont des exemplaires seront envoyés à l'adresse (france) ou au correspondant du *Mining Journal*, 12, Rue de Chabrol, à Paris, ou au Directeur du Journal, 26, Fleet-street, à Londres.

On s'abonne directement aux bureaux du *Mining Journal* en envoyant franco un mandat, sur Londres, de 1*liv*. 6*sh*. (32*fr*. 50*c*.) à l'ordre du directeur.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JANUARY 19, 1856.

The *London Gazette* of the 20th November last contained the important announcement that the Right Hon. Sir GEORGE GREY, Bart., had appointed the undermentioned gentlemen to be Inspectors of Coal Mines in Great Britain:—JOHN J. ATKINSON, WM. ALEXANDER, JOHN HEDLEY, LIONEL BROOK, THOMAS EVANS, and PETER HIGSON, Esqrs.

As far as numbers are concerned, therefore, the Secretary of State has tardily complied with the urgent and repeated demands for an increase. This is an important and a valuable concession to public opinion, but it is not all that is required. The coalowners, the viewers, the committees of the Houses of Lords and Commons, as well as the working miners and their advocates, were all unanimous in recommending that these appointments should be made on certain specified conditions, which may be briefly stated as follows:—

1. That the salaries of the inspectors should be increased, so as to render the office worth the acceptance of able and experienced men, and in order to obtain their exclusive services.
2. That no person be appointed who has not had from seven to ten years' experience as the practical manager of a colliery; and—
3. That before their appointment, the candidates for inspectorships should undergo a thorough examination, by competent persons, as to their fitness for the office.

As to the first recommendation, or condition, it appears that, after ascertaining the amount which the inspectors earned, in addition to the Government salary, the Secretary of State dropped the subject, and the new inspectors are appointed on the original terms. It is not, therefore, surprising that among the names in the *Gazette* there should not be one entitled to be considered as eminent, and that most of them are perfectly unknown beyond the narrow limits of their several localities. They may nevertheless be "good men and true," but the mining public reasonably expected that such only would be appointed whose known antecedents were a guarantee of their competency. But who, it may be asked, will undertake the duties, vexations, and annoyances of this onerous office, unless they improve their pecuniary resources by doing so; and if the salary be only of such an amount as to tempt second-rate men to become candidates for it, the Home Secretary has no right to complain, whatever the public may do. We think there cannot be two opinions on the niggardly policy pursued by the Government on this subject, and trust that the miners will beat themselves, and petition Parliament for redress.

Our readers cannot have forgotten that a memorable meeting of the coal owners and mining engineers was held in London, in 1854, professedly for the purpose of concerting measures for diminishing the number and fatality of accidents in coal mines, of which the highly esteemed and justly celebrated Mr. NICHOLAS WOOD was chairman. One of the subjects which occupied its attention, and which was strenuously insisted on, was that no one should be appointed an inspector of "less than 10 years' standing as manager of a colliery." Some thought this too little, and would have 15 years; whilst others, with a deeper reverence for age, and under an impression that wisdom dwelt only with grey hairs, advocated an experience of 20 years. Bearing this in mind, our readers will be somewhat surprised to learn that one of the new inspectors is reported to be a young gentleman of some 22 or 23 years of age, who has had the good fortune to be employed for a brief period in the Dowlais collieries, of which Mr. HUTCHINS, M.P. (the Chairman of the last Committee of the House of Commons), is a proprietor, and, what is still more inexplicable, of which Mr. NICHOLAS WOOD is, or was, the consulting engineer. And it is further said that the extensive and important district of South Wales, including the Dowlais collieries, is to be entrusted to this precocious and fortunate young man. Such are the prevalent rumours from north to south; and we embody them in our columns that the parties implicated in this extraordinary proceeding may have an opportunity of refuting the report, if it be untrue, and which doubtless requires explanation, for which our columns are freely at their service.

The examination of the candidates was referred to Mr. N. WOOD and Mr. WASHINGTON W. SMITH. The nomination of these gentlemen gave unalloyed satisfaction, for it was confidently believed that the grave duties imposed on them by the Government would be well and ably discharged. But again rumour is rife with complaints, and with what truth and justice we know not: it is widely reported that these examinations were brief and very incomplete, and that, in some instances, the candidates passed through the ordeal in five minutes. Again we say, we give this as common report, extensively prevalent, and shall offer no comments upon it at present. We wait for explanations; or for what is better, if it can be given—for a refutation.

These rumours have created intense dissatisfaction throughout the country, and it is high time that some public notice should be taken of them,

so that, if without foundation, they may be refuted, and the country may be assured that the interests of 200,000 men, upon whose dangerous labour its greatness and prosperity mainly depends, have not been sacrificed, but that the Inspection Act, recently passed for their protection, has been honestly, fairly, and efficiently administered.

In last week's Journal we noticed the proceedings at a meeting held at Truro, for discussing the question of rating mine dues and mining profits, or dividends, to the relief of the poor. It will be remembered, that in the last session of Parliament the county Members brought in a bill for the professed purpose of rating lords' dues; but, as was shrewdly guessed at the time, with the surreptitious intention of silencing introducing a clause for making the adventurers pay on their profits or dividends, and thus still further crippling this staple industry of the kingdom. The mining community rose against the measure, and the Members finding they could not carry their ends in that session, sent round circulars stating that there was not the least difference of opinion as to the justice and propriety of the principle of rating lords' dues, but difficulties did arise in the mode of carrying it out. They thought it better for the time to withdraw it, consult the various interests affected, and bring in an amended bill early next session. This will be found in our columns of July 7th. We there called attention to the facts of the case, and warned all interested in mining not to sleep at their posts, but to unite, as one man, to oppose the rating of mines; and, as the mining community is widely spread over distant parts of the country, we recommended associations to be formed, to open communications with the different districts, so that strong remonstrances against the measure might be supported by evidence before the Legislature.

Whatever may be the result, it is highly satisfactory to find, and but justice to the Cornish Members to record, their opinions as expressed by Mr. ROBARTES, who stated that he had well considered the subject, and he was decidedly in favour of rating the lords' dues. He wished to restore the matter as much as possible to the state it was in before that unfortunate law suit by which it was decided that if the dues were reserved in money they would be free from rating. He was very much against interfering in any way with the profits or capital of the adventurers. He wished to see the question in the same position as it was previous to 1832, when the adventurers were never rated, but only the receivers of the dues.

Look at the question how we will, we shall find it a complex and a difficult one, but certainly nothing can be more unreasonable and unjust than to allow those who draw extensive incomes from the mineral wealth of a parish, in the shape of dues, without trouble, expense, or even

stock are composed of perishable materials, and the renewal of the permanent way, building and repairs of locomotive engines and carriages, cost of fuel, salaries, &c., are items of large amount, and should be considered of very great importance. Those to whom those duties must fall, will prove thoroughly unfit for their occupation if they cannot discover ample grounds for a thorough reformation in the present mode of conducting the business of railways.

We have already adverted to a suggestion which has been much discussed, and, in some instances, carried out with success—the working of the lines by contract; and we cannot see why the same system might not be advantageously followed up in those departments requiring professional services. The lines being now generally completed, every company should secure an engineering staff at fixed annual salaries, and such an arrangement might be carried out satisfactorily to the parties engaged, and to the advantage of the company. The enormous law costs to which companies have been, and are still, subject might be greatly reduced and simplified, by paying the solicitor a liberal salary instead of fees, and in no case allowing any extra charges. Under such an arrangement the interests of the solicitor and the company would be identical, as both would be benefited by taking every possible care to avoid all such law and parliamentary proceedings as were not absolutely necessary to the well-being of the company. With respect to barristers, however, such an arrangement would be impossible, owing to the customs of the Bar; but the enormous expenditure now incurred might be very considerably reduced, by not employing more than two counsel on each bill, and instituting a more moderate and reasonable scale of fees.

But the great secret of all railway reform is taking away from the direction all those irresponsible powers which they have so long wielded, giving to the proprietors greater control over the proceedings of the board, admitting them to be present at their deliberations, but not to take part in the proceedings; the councils of the municipal corporations and the public commissioners' courts are cases in point. The present secrecy with respect to accounts should also be abolished, and every book and document open at reasonable hours for inspection by the shareholders. That such reforms are really needed, and are practicable, there cannot be the shadow of a doubt, and if honestly and determinedly carried into effect, it is equally certain that they would most essentially promote the prosperity, by diminishing the extravagance of railway companies.

We shall watch with much interest the proceedings at the meeting on Tuesday, especially as to the nature of the reforms proposed, and the changes contemplated in railway management, and return to the subject next week.

The vast progress which has been made by the joint-stock banking system since its introduction, little more than 20 years since, is fully exemplified in the reports of the periodical meetings of two banks, as recorded in another column—those of the London and Westminster, and the London Joint-Stock. The latter of these, it will be seen, declared a dividend of 12½ per cent., and a bonus of 14s. 3d. per share, equal to 10½ per cent. per annum. Their paid-up capital is 600,000/., they have deposits exceeding six millions and a quarter, a surplus fund of 169,748/., buildings and furniture estimated at 38,575/., and there is invested in Exchequer Bills and India Bonds 810,925/., making a floating capital of considerably above 7,000,000/.. The London and Westminster pay a dividend of 6 per cent. per annum, and a bonus of 5 per cent. on the capital, equal to 16 per cent. per annum. Their paid-up capital is 1,000,000/., they have deposits amounting to 8,744,095/., a surplus fund of 137,890/., and hold securities in Government Stock, Exchequer Bills and Bonds, and India Bonds, amounting to 1,949,074/., making a total of nearly 10,000,000/., sterling.

The above results, particularly under the political aspects which have ruled during the past year, are most extraordinary; in general, trade and commerce, as well as banking business, has flourished, notwithstanding the war. The failures during the half-year have been fewer than usual; and in spite of the pressure arising from the high rate of interest, business generally has prospered. These facts bear indisputable evidence of the soundness of the principles of joint-stock banking, and their security and profitable character as channels for investment.

Mr. MATTHIAS DUNN, Government Inspector of Coal Mines, read a paper at the North of England Institute of Mining Engineers, "On Boiler Explosions." Mr. DUNN commenced by stating that this had become as exciting a subject as the explosions in collieries, and in many cases as difficult to account for; he had collected together some of the most important parts of the evidence taken on the enquiries into several cases of explosion, and had also consulted several scientific authorities as to the effects of steam and water in connection with hot iron, as well as the ordinary apparatus of boilers in respect to the steam and water communications, with a view to invite discussion, and bring forward the practical talent with which the Northern Institute abounds, to endeavour to devise some means of checking this growing evil. Mr. DUNN has also endeavoured to ascertain how far the danger is increased by the prevailing custom of having four, five, or six boilers all intercommunicated by the same steam and feed-pipes; but practical persons seem to think there is nothing objectionable in this, provided that when one boiler is feeding all the other feed-valves should be shut. The quantity of water in high-pressure boilers continues to be ascertained by the float, an apparatus which has recently been improved upon by sundry persons. Amongst these improvements are Dicks's patent anti-explosive apparatus, which lowers the temperature by the introduction of cold water; JOHNSON's improved self-acting alarm, which whistles loudly on the falling of the water below a certain point; HALL's water blow-off valve, to operate when the water has fallen to a dangerous extent; and Mr. SYDNEY SMITH's steam indicator, magnetic water-gauge, and cylinder water-gauge.

An explosion occurred at Kibbleworth Colliery on the 19th September last, killing one man. There were five cylinder boilers, each 30 ft. by 6 ft. diameter, loaded on the safety-valve to 35 lbs. on the inch. This explosion was believed to have occurred through two of the feed-valves being open at the same time, and the water primed or driven into the next boiler, and causing the explosion. At the Walker Works explosion of a boiler, one of six all intercommunicated, one man was killed and several others grievously wounded; the safety-valves, 3 inches in diameter, were found free, and in good order. One continuous feed-pipe supplied all the six. The evidence generally went to show that the plates of the boiler had been heated to redness, after which an explosion might occur at any moment, and Mr. DUNN came to the conclusion that the accident originated in the proper quantity of water in the boiler having been wanting. At the Consett boiler explosion, in November last, there were ten boilers, eight of them supplied by the same steam-pipe, and the whole by the same feed-pipe, all fed with cold water. Here too, from the evidence, it fully appeared that the catastrophe occurred through insufficiency of water. From all the facts and extracts from the evidence in the whole of these cases, Mr. DUNN deduces the following safeguards for the prevention of explosions:

1. It would appear that tube-boilers are more liable to accidents from over-heating than ordinary ones, owing to the small quantity of water above the tube, whilst the most intense heating takes place when short of water; and practice shows that little or no advantage is derived from the application of a tube.

2. Every boiler safety-valve should be duplicated, one upon the connecting steam-pipe, or an indicator, that upon the steam-pipe being equal in area to all the other safety-valves.

3. As very much depends on the well working of the float, it should either be duplicated, or a check apparatus applied upon some other plan.

4. The bottom of each feed-pipe should be furnished with a flap or horse-foot valve, to guard against priming.

5. The slide-pipe should be made to discharge in some place visible to the fireman, as the imperfect closing of it has frequently led to an unexpected diminution of the water, and consequent explosion.

6. It seems desirable that the water-gauge employed in the locomotive should be applied to ordinary engine-boilers.

7. The adoption of a fusible plug of the most esteemed alloy, it being placed on the upper part of the tube, or in the side of the boiler where most exposed to the flue-fire; such plug to be punched out, and removed from time to time, to guard against the effects of oxidation.

We have received a printed circular, with "Reflections on the Bursting of Steam Boilers," but perfectly anonymous, in which the writer advances some novel theories. The writer considers the cause of most explosions can be traced either to the defective state of the boiler itself, neglect to supply water, over-loading the safety-valves, their imperfect working, or to suddenly stopping powerful machinery, without checking the rapid generation of steam. The cause of many of them are, however, veiled in mystery, which has induced the writer to circulate his reflections and observations, in the hope that some plan may be devised for preventing such serious loss of life and destruction of property. Steam is known to be produced in two separate states—one aqueous vapour, the other aeriform steam. Aqueous vapour, or moist steam, is that newly formed, and little above the temperature of boiling water, possessing highly elastic force. Aeriform, dry, orgaseous steam, is that confined for a time under heavy pres-

sure, and at a temperature much higher than boiling water, but not so elastic as aqueous vapour. When the working of a steam-engine is suspended for a time, although the fire-door may be opened, and the rapid obulation arrested, there will be some vapour adding to the steam, and the heat ceases to be carried off as while working, and the writer thinks it probable that in such case a boiler may become surcharged with aeriform steam, and not having sufficient elasticity to open the safety-valve, may by some means be converted into elastic vapour, and cause an explosion. Many circumstances might effect this, such as pumping in cold water, or the opening of the dampers, but electricity is suggested as the most probable cause of the transition of steam from one state to the other. Some considerations are then entered into, with a view to show how electricity is engendered in a boiler in a similar manner as in a thunder-cloud; and it is stated that when a steam-engine ceases to work, the generation and escape of steam should never be wholly suspended; the water should be kept boiling moderately, and the steam blowing off, as long as the engine is at rest.

The writer concludes by saying that if the existence of aeriform steam were better understood, the practicability and importance of applying steam as a chemical agent in various manufacturing operations would become sufficiently apparent. In the state of aeriform steam, the elements of water are so loosely combined that they may be easily separated by any other attractive element with which they may come in contact, when confined and in a state of intimate diffusion.

The PERNAMBUCO RAILWAY is brought before the public under such very promising auspices—viz., that of the Imperial Government of Brazil, who, conjointly with the Provincial Legislature, guarantee a minimum revenue to the company of 7 per cent. per annum—as quite take it out of the category of hazardous speculative investments; and these conditions are quite sufficient, without putting forward any others, to recommend it to the consideration of English capitalists. But, independently of the Government guarantees, and of the other important favours contained in the concessions, and testing this line of railway communication from the coast of Brazil to the interior of the country solely by the gauge of its own merits, we do not hesitate to say that it is one of the greatest importance to the whole of that vast empire, and one that cannot fail to command, when completed, a very large and lucrative traffic. A glance at the map of Brazil, by any one possessed of geological knowledge of the country watered by the River San Francisco, and of the principal seat of the rich auriferous deposits, of the diamonds, and other minerals, for which that empire is famous, will suffice to show that too great importance cannot be attached to this line of railroad.

It is, perhaps, not generally known that the River San Francisco, which takes its rise to the south of the province of Minas Geraes, the great gold and diamond-bearing district of Brazil, is navigable for large vessels from a town called Barra das Velhas, situated in the heart of that province, to the province of Pernambuco, in the north, a distance of more than 600 miles. At the lowest navigable portion of the upper level of the river the projected Recife and San Francisco Railroad will have its inland terminus, thus putting the port of Pernambuco in direct communication with the rich country watered by the San Francisco, and, through that river, with the province of Minas Geraes. Those who are familiar with the difficulty experienced at present in the conveyance of machinery, &c., from Rio de Janeiro to the mines, by mules, over the series of mountain ranges that divide Minas Geraes from Rio, will fully appreciate the boon of railway and water communication from the coast to the heart of that country.

The towns situated on the San Francisco have at present an inland trade of their own, by means of the river communication; and this is not inconsiderable. The unlimited natural resources of these teeming regions have, however, remained in a great measure undeveloped, in consequence of the impediments to navigation that exist in the lower waters of the river, hundreds of miles being rendered unnavigable by rapids and waterfalls, among which stand pre-eminent the stupendous falls of Paulo Afonso.

The Pernambuco Railway overcomes the difficulty occasioned by these natural barriers, and completes the communication with the sea-board—the grand desideratum where the agricultural products of the tropics have to be transported to the coast, to be exchanged for the manufactures of the old world, and where heavy machinery is required far up in the interior, for the extraction of the precious metals found there.

The advantages of the Pernambuco route to the upper level of the San Francisco are manifold:—1. The port is nearer to Europe than any other on the continent of South America.—2. It traverses a rich and extensive sugar, cotton, and grazing country.—3. It avoids both the Borborema and the Mantiqueira ranges of mountains, and is devoid of any engineering difficulties whatever.—And, lastly, the land along a great portion of the line is well cultivated, and the country has a larger population than almost any other part of Brazil.

The trade of the country on the borders of the San Francisco is carried on in clumsy vessels, of from 40 to 50 tons burden, and the inland trade at many of the towns on the banks of the river is very considerable. The annual imports at Barra alone, 20 years ago, were 20,000 barrels of rum, 3000 hides, and 4000 half-hides tanned, besides coffee, cheese, brown sugar, salt, bacon, and succade. The trade has greatly increased since that period. The inhabitants, owing to their isolated position, are at present obliged to forgo, in a great measure, the use of European products, the cutlery and cotton goods of England arriving at these secluded places at a cost fourfold that expended in their production. Strings of mules are, nevertheless, constantly wending their way from Rio de Janeiro, over the rugged serras, for hundreds of miles, into the interior of Brazil, laden with small packages of goods of British manufacture. The increased demand for these, when locomotives and steamers can convey them, and when, through these facilities to transport, the native agricultural products will have an enhanced value, can hardly be over-estimated. We heartily wish success to this great undertaking, and we are convinced it will be of scarcely less benefit to ourselves than to the Brazilian people.

It is much to be regretted, that whilst great indignation is manifested by those engaged in mining enterprise at the reflections cast thereon by the public, the proceedings at the meetings of some companies tend rather to increase than to diminish the bad feeling of which they complain, and to deteriorate the value of shares in mining adventures generally. The meeting of the GREAT CRINNIS COPPER MINING COMPANY, held on Thursday (Mr. C. R. READ in the chair), was of a character not calculated to alter our opinion on the subject; the remarks of certain shareholders having been made with little regard to the law of libel, and with still less to the feelings of those they attacked.

It will be recollected, that at the general meeting on Nov. 29 last it was resolved that the report of the committee of investigation, and the directors' reply thereto, be printed and circulated amongst the shareholders, and that they be discussed at a meeting appointed for that purpose. From the report alluded to, it appears that the negotiation for the purchase of the mine was pending during July and August, 1852, and completed after the committee and secretary had visited the mine, on August 23, when it was resolved that the terms—3500/- in cash, and 3500 shares—be agreed to. On Oct. 5 following, it was resolved to rescind that minute; and on the 22d of the same month, a Mr. PARRY attended to execute the assignment of the lease, which was found on inspection to have been originally granted by Col. CARLYON to Capts. WEBB and DINGLE, at a rental and certain dues; by whom it was assigned to Mr. MANUEL for 500/-, and on the same deed was recited that Mr. MANUEL assigned it to Mr. OWEN PARRY for 2000/-, who further re-assigned it to MESSRS. DUDOT, ENGLAND, CORBETT, PINKERTON, and READ; Mr. MANUEL to receive 1000/- cash and 1000 shares, and Mr. OWEN PARRY to receive 6000 shares.

In the original prospectus, it was stated that arrangements had been made that the purchase of the mine should be paid in shares; and in the first balance-sheet was the item, "Paid for the mine, in shares, 7000/-," whilst the 1000/- in cash was not mentioned, and, on enquiry, was found to be included under "preliminary expenses." Again, in the cash-book, June 14, 1853, was an entry of 3000/-, without any name thereto; and, on reference to the counterpart of the cheque-book, they found a corresponding item, marked P., C., and D.; the minute-book showing that MESSRS. PINKERTON, CORBETT, and DUDOT, were present on that day. The merchants' bills had been six months in arrear, in direct violation of the rules.

In concluding the report, it is submitted that the cost of the mine, and mode of payment, required further consideration; that the cost of management had been excessive, and far exceeded the services rendered; that the financial management had been such as to injure the reputation of the mine, and cause unnecessary loss to the proprietors; and that additional mining experience was necessary for the development of the property.

In the directors' reply to this report, each charge of irregularity is met in a way that would appear, at least, to exonerate the directors from a

large amount of the blame which has been cast upon them; and notwithstanding that much could, doubtless, be adduced in condemnation of the manager in which the company has been managed, it appears that the directors have acted with the best intention of rendering service to the company, although, from want of experience in the office they have undertaken, they have in many instances been led into errors of the worst description. The value of the property is stated to be great, and to require but care and judgment in prosecuting future operations to render the mine lastingly remunerative to the shareholders; it, therefore, behoves all connected to endeavour to be oblivious of the past, and to look to the future for more favourable results. Two of the late committee of investigation now form part of the board of directors, and the former members of that board express their entire willingness to assist them in their efforts to improve the position of the company: if this feeling be carried out with the integrity which the expressions at the meeting would lead us to anticipate, the satisfactory progress of the undertaking must be the result.

The meeting, although opening in a very turbulent manner, was before the conclusion of an unanimous character; and the proposition by Mr. SHIFFTON, seconded by Mr. COXHEAD, "That the suggestions of the committee of investigation, as annexed to their report, be adopted so far as may be consistent with the best interests of the company," was unanimously carried.

The HOLMBUSH MINING COMPANY held a special general meeting on Wednesday, for the purpose of making certain alterations in the Deed of Settlement, in order to approximate it more closely to the Cost-book System, or, in fact, to do that which a few of the shareholders had undone but a few months since.

The CHAIRMAN remarked that there were special advantages under the Deed of Settlement which would be retained, but if any mine adventure of the present day read that document through, there was little doubt it would be condemned, as altogether crippling operations, both as to the working of the mine or disposing of the shares. A short time since, it may be remembered, it was proposed to bring this company under the Cost-Book System, and a most excellent code of rules was carefully drawn up; but, although a considerable majority were in favour of the alteration, under the Deed of Settlement the consent of the whole must be obtained; and thus it was in the power even of one shareholder, however small the number held by him, to upset the whole proceedings.

It is only necessary to refer briefly to a few of the alterations which were carried on Wednesday, to satisfy any party of their value. The chief one may be considered the facility for disposing of the shares in the market, the low price at which they continue being attributed to the obstacles in the way of transfer. It is now proposed to divide the mine into 5000, instead of 1000, shares, and to rescind the rule, that the secretary for the time being shall prepare the transfers of shares, and in addition to the stamp duty charge a fee of 2s. 6d. The rules were also expunged which rendered it necessary for a certain number of proprietors to be present, and also that they should have no power of voting until they had held their shares three months. In addition to the alterations alluded to, there were several other technical rules modified, which, as some of the proprietors present observed, had they known were in existence, they would never have risked any capital in the mine. The whole of the alterations having been agreed to by the proprietors, with the exception of one dissentient (the holder of five shares), and who appears upon all occasions to dissent as a matter of course, it is to be hoped this property will shortly rise in the market, and thereby enable those unwilling to go on to obtain something like a fair return for the money they have invested.

It would appear from the reports, that the patience and perseverance of the shareholders are likely to be amply rewarded. Let them look at the present position of the property, and the state it was in when MESSRS. CREASE undertook the management, and secured the services of Captain NICHOLAS SECCOMBE. It is now conducted in a miner-like manner, and although the debts have been reduced during the past year upwards of 3000/-, they have in reserve, laid open and available, ore valued at 7000/- Under such circumstances, it is only fair to suppose that, at no distant period, Holmbush will again resume paying good and regular dividends.

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

JAN. 17.—The telegraphic wires have at last been worked to some advantage, in bringing the gladdening intelligence of peace, which, if true, will make every heart beat with joy, and again bring that happiness and prosperity which for 40 years we so fully enjoyed. The news of such a happy consummation of events produced, of course, a considerable advance in the price of funds, but the precise terms not being well known or understood, the rise has not been so great as might be expected, the extreme advance having been only 3s. 7s. 6d. per cent. Shares were not influenced in any way, and there is scarcely any change to report since this day week; generally they have shown much firmness. Mining Company shares fell 2/- on the settling day for shares, but have again recovered. Railway shares have been very firm, with an upward tendency, but 5s. has been the extent of any fluctuation; other shares are without change. The following are the latest quotations:—Consols, 89½; New Three Cent., 80½; Royal Bank, 20½; Patriotic Assurance, 8; Consumers' Gas Company, 8; General Mining Company, 2; Mining Company for Ireland, ex div., 13½; Belfast Junction Railway, 40½; Dublin and Wicklow, 5½; Great Southern and Western, 51½; Irish South-Eastern, 5½; Midland Great Western, 48½; Waterford and Limerick, 22½.

At the half-yearly meeting of the British and Irish Steam-Packet Company, held yesterday, there was a dividend declared of 5 per cent., free of income tax. The directors stated in their report that the vessels were in a state requiring considerable repair, and that they had been put in a state of thorough efficiency during the past six months, and that two of them are now engaged in the Government service.

I understand that an application is about being made to the Lord Chancellor to wind-up the affairs of the Royal Hibernian Mining Company, with its reported 50,000 free shares, and that the same will be presented during the ensuing week.

It may not be uninteresting to many of your readers, and especially those connected with Irish mines, to take a short review of some of our mining companies. The returns of produce, weekly published in your Journal, sufficiently attest the productiveness of a few mines; and, notwithstanding the dampers thrown upon mining speculations in this country by the unfortunate failure of some of the lately-formed companies, the opinion is hourly gaining ground that Ireland possesses mineral deposits to an extent, and of a value, not now appreciable; and nothing is required but fair play and honesty of purpose to make mining pursuits in this country sources of profit and wealth to the adventurers; while they would be a substantial aid to the prosperity of the country, through the medium of the industrial employment they would afford. "Employ the people, and enrich yourselves, by developing the great natural resources of the country," is the excellent motto which has been adopted by the General Mining Company for Ireland; and with this as a preface, I will give some account of this company, as taken from the published reports and statements of accounts.

This company was first formed in October, 1845, and was completely registered in February, 1846, now exactly 10 years since. The capital was stated at 250,000/-, in 10,000 shares of 25/- each; and up to April, 1853, the amount received was 66094. 12s. 6d.—being 60364. 17s. 6d. received by the issue of 3715 shares, at 12. 12s. 6d. per share, and 5724. 16s. proceeds of deposits on shares subsequently cancelled. In the second half of the year 1853, the company suffered a heavy loss, in consequence of a reduction of 4/- per ton on lead ore, and 12. 10s. on copper ore; further, in consequence of a diminution in the quantity and quality of the ore, and a great advance in wages. The directors, availing themselves of the power which they had, issued 733 shares, which had become previously forfeited, at par, which brought in 1191. 2s. 6d., and made a call of 7s. 6d. per share, which produced 16682/-, making the number of shares 4448, and the amount paid upon each 21. In subsequent half-years, two calls were made of 10s. each, making 34 paid upon each share, and the total capital 13,916. 15s., at which it stands at present, or rather at the time of the last half-yearly meeting, when the nominal capital was reduced from 250,000/- to 60,000/-, the nominal number of shares from 10,000 to 6000, and the nominal value of each share from 25/- to 10/- From this it will be seen that there are 1552 shares yet to be disposed of; and the directors are empowered to issue them at such times, and at such prices, as may be found most beneficial to the interests of the company.

I now come to their property, which extends over 4500 acres [Lackmore is not included in this], comprised under—Shalee West, Shalee East, Gurnadine, Ballynoe, Silver Mines, Garryard East, Garryard West, and some other denominations, situated at the foot of the Kuper Moun-

tains, in Tipperary, within 14 miles of Limerick, and in the vicinity of Nenagh. I shall now take these mines in the order in which they stand, showing the total expenditure and receipts since they came into the possession of the company, leaving their more detailed consideration for a future occasion. From Shaltee Mines, the total receipts have been £1,593. 14s. 9d., and the total expenditure £5,757. 7s. 5d., showing a profit of £536. 7s. 4d. From the Gurtinadine Mine, worked only since 1849, the receipts were £20,932. 15s. 1d., and the expenses £23,522. 13s. 1d., showing a loss of £2,589. 18s., which appears to have been occasioned by a heavy outlay for machinery, reservoirs for water, &c., included under the head of expenses. For the last few years the returns from this mine have been very large, the last half-year exhibiting a profit of £7000, exclusive of £6000 expended on turf-work. The receipts from Ballynony were £910. 3s., and expenses £1,352. 16s. 3d. The captain at the mines entertains a favourable opinion of this mine. None of the other portions of the property have shown any receipts worth mentioning. The Luckmore Mine, since sold, produced £5852. 17s. 10d., at an expense of £674. 8s. 3d. Next week I shall pursue the further consideration of this subject, and submit a statement of income and expenditure since the formation to the present time.

IRON AND COAL TRADES OF YORKSHIRE AND DERBYSHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

JAN. 17.—The present state, as well as the future prospects, of the Iron Trade are highly encouraging, and little doubt exists of there being an extraordinary demand in the spring, especially if the Russian negotiations should result in peace, which the firm attitude assumed by Austria renders probable. All descriptions of iron are firmer in price than they were two months ago, and the trade having passed through the gloomiest season of the year, without any marked depression, we cannot but anticipate well for the future. The Staffordshire meetings have resulted in a determination to maintain present prices, which appears a prudent measure; until a heavier demand "sets in," an advance would be injurious. The Scotch pig-iron market has rallied from its slight decline, under the influence of steady purchases, and the ascertained fact that stocks at Glasgow are much lighter than was supposed.

The Sheffield Steel and Cutlery Trades have received a slight impetus from the favourable state of affairs in America. A correspondence has been created, with respect to Sheffield manufactures, which is highly important to the trade and commerce of a very extensive manufacturing town like Sheffield. A correspondent, who signs himself "Amicus," and publishes his remarks in the *Times*, made a slashing inroad into the reputation of Sheffield manufacturers a short time ago; his observations being to the effect that the great bulk of the manufacturers of Sheffield were rubbish, and useless, arising from the love of manufacturers to cultivate cheapness rather than permanent durability. These assertions upon the trade of the town have drawn forth several replies, the last of which is from a Master Cutler, who admits that the cutlery supplied to the War Department is contracted for at such low prices, and of so inferior a make, as to exclude from competition that class of manufacturers who have the reputation of making a good article. The *Times* hits the master-cutler terribly hard for his candid avowal of the system of cheap manufacturers; but we think there is abundant evidence to prove that Sheffield stands univalled for the excellence of its cutlery.

The Coal Trade may be described as in a very active state. There seems to be no limit to the supply, which is increasing in all parts of the country. The case of arbitration which has been going on for some time between Mr. Fowler and the Rev. Mr. Pearce, at Chesterfield, is likely to have an early termination. The evidence on both sides was concluded on Wednesday. A new coal siding is in course of construction from the Whittington Collieries to the Midland Railway, which will form a most valuable outlet for the coals of a vastly increasing coal-producing district. The saving in the mode of transit, as now conducted with carts, will be nearly 2s. per ton.

Another shareholder in the Wrysgan Slate Mine, residing in Chesterfield, has relinquished, or rather given 12s. 10s. to be released of, his 25 shares. There are several others who are liable to the company's claims, but they have determined to resist it in a court of law.

On Thursday a dividend of 25s. per share was paid to the proprietors of the Alport Mines, Derbyshire. This, added to the dividend of 20s. per share, paid in September last, makes a total of 45s. per share, or a total of £240. paid to the proprietors during the last eight months. A balance of 510. 3s. 1d. was left over to meet contingencies, and the prospects of the mine are very favourable.

A great increase is taking place in the iron trade of Middlesborough, there being nearly 60 furnaces in blast, the annual produce of the district being about 400,000 tons. The Cleveland hills now supply above 3000 tons of ironstone daily, which is transmitted by rail into the different iron-producing districts of Yorkshire.

We stated last week that a Rating of Mines' Bill would be introduced in Parliament in the ensuing session. It would appear that the Poor Law Board are determined to make the Cornish miners pay poor-rates, which are paid in Derbyshire. The promoters of the intended bill are in communication with the Members of Parliament connected with Derbyshire, and the difficulty seems to be to frame a bill which would not alter the present system of rating in Derbyshire, which has been the custom for so many years. The last bill was withdrawn, at the urgent request of the Derbyshire Members, and in obedience to the formidable opposition arrayed against it.

THE IRON AND METAL TRADES OF SOUTH STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN BIRMINGHAM.]

JAN. 17.—The last of the quarterly meetings of the ironmasters was held on Saturday evening, at Dudley, and the spirit manifested at the previous meetings was well sustained, and some good orders were reported. Pig-iron was firm, and in demand. Ironstone sold at from 18s. to 20s. per ton. Since then it has been rumoured that the small makers of inferior quality have been underselling, but I do not believe it is being carried on to any great extent. Some few needy holders may give bargains, but the large houses are well supplied with orders at the quotations of the preliminary meeting, and there is no necessity for a reduction. None will generally be adopted, unless the consequence of the gratifying news announced to-day, of the acceptance by Russia of the propositions of the Western Powers shall lead to a temporary depression in the Iron Trade. The intelligence reached here this morning at 11 o'clock, and spread with rapidity throughout the district. Various speculations were ventured relative to its probable effect on the staple trade of the county. By some it was predicted that, peace proclaimed, we should have an immediate restoration of full and entire confidence, accompanied with a relaxation of the Bank screw, increased facilities for carrying on our works, and the re-opening of many foreign markets now partially closed; others, however, speaking more immediately from book than imagination, are not quite so sanguine as to the immediate probable effects of peace. It is well known that a great number of the most important works in South Staffordshire are at present employed preparing iron of all kinds for naval and military purposes, that the casting of shot, shell, and cannons, have been lucrative trades in this neighbourhood, and that all the contracts recently entered into have been subject to the condition that the Government are at liberty to countermand the orders whenever the necessity for the article shall cease. The same, I believe, applies to the manufacturers of all kinds of small-arms in this town, and hence it is that the news of to-day has been viewed by thousands of persons depending on the war as the all-important topic of the day. In general, however, the intelligence has been hailed with pleasure, and a corresponding activity in the share market to that telegraphed from London soon took place here at our Exchange. At 1 o'clock a meeting of the ironmasters was held at the Union Inn, Union-street, for the purpose of considering the course to be pursued with reference to the question of freights charged by the London and North-Western Railway Company. Philip Williams, Esq., presided over a large number of the most influential members of the trade. The subject which I noticed in my last letter was discussed at length, and the injurious effects of the new charges having been pointed out, the following resolution was unanimously adopted:—"That the trade protests against the course adopted by the railway companies in reference to their charges, and that a committee be appointed to confer with those bodies, with a view to the rectification of the present, as well as of any other that may at any time be made of an unfair and illegal character." It was then stated that Capt. Huish, and other officers of the London and North-Western Railway Company, were in attendance, for the purpose of conferring with the ironmasters upon the subject in dispute. The Chairman, and Messrs. Mathews, Blackwell,

Cockrane, Sparrow, Smith, Haden, and Morris, were appointed a deputation; and they proceeded, about 2 o'clock, to the Queen's Hotel, where the railway officials were in waiting to receive them. A lengthened conversation ensued, in which the injurious tendency of the proposed freights were pointed out; and the result was that Capt. Huish admitted that the charge of 11d. for the sidings was not such as he approved of; and, I believe, he gave the deputation to understand that would be altered. Relative, however, to the general charge, no such satisfactory result was obtained, and the question still remains in abeyance. Of one thing, however, there can be no doubt, and that is that the iron and coal trade of South Staffordshire cannot afford any additional restrictions, and that the less imposed upon them by those who hold the means of transit in their hands, the better. It is certain the ironmasters will feel bound to adopt every means in their power to protect themselves from improper freights.

In the Coal Trade the demand continues brisk and prices high, but the news of to-day may, as I have observed above, produce unexpected results. I am sorry to say that, thoroughly independent of any effect likely to be produced by the prospect, or rather now the certainty, of peace, some of the large manufacturing establishments in the heavy iron trade are short of orders; and one house, in the neighbourhood of Smethwick, discharged eighty hands on Saturday night last; and many other establishments in our fancy trades are awaiting orders from the new patterns which the travellers have taken out.

The trade of the town, on the whole, is rather inactive, and will remain so for a short time longer. It is really incredible the effects already produced here in the course of a few hours by the peace news. Wheat fell here to-day 5s. per quarter, and fluctuations in various ways, amounting to many thousands of pounds, have taken place. If the news be fully confirmed, another week will be productive of marked results throughout this district; at present, however, all is doubtful speculation.

In the General Metal Trade, the reports to-day are satisfactory. All prices are firm, and with a threat of another advance in the price of tin. Copper is stationary, and with an average demand.

In connection with the district, another circumstance of local interest occurred to-day. It appears that yesterday the official assigned in the case of the Lichfield Bank was engaged in closely investigating the affairs of Mr. Greene, the proprietor, when it was ascertained that there had been a misappropriation of money to a considerable extent. Suspicion fell upon a Mr. Lorton, the head clerk in the establishment, and on examination it was found that he had embezzled, no less a sum than £7300. It was done through the medium of notes which ought to have been cancelled, but which were re-issued by him, and money to their amount embezzled. Being accused of the offence, he at once admitted it, and was given into the custody of a police officer. This morning he was taken before the magistrates, and ordered by them to be removed to Lichfield, and he accordingly left this evening for examination in that city. The unfortunate man is upwards of seventy years of age (a bachelor), and under no necessity to commit such serious frauds upon his employer. The messenger from the Bankruptcy Court searched his house yesterday, and found a great deal of property there.

THE METAL TRADES AND INDUSTRIAL PROGRESS ON THE CONTINENT.

[FROM OUR PARIS CORRESPONDENT.]

JAN. 16.—The fall in stocks, to which allusion was made in the last communication, continued until Saturday, when they reached their lowest point—in fact, on that day, there were unmistakable signs of panic on the Change. The statement of the Bank balance, and the complete dissipation of peace rumours, all contributed to augment the difficulties of the financial situation which immediately followed the settling. Since Saturday, however, the unreasonableness of the panic has become apparent, which, coupled with the desire to buy at the reduced prices, has caused the stocks to rally gradually but firmly; and many who sold during the panic are now buyers, in consequence of the report to the Emperor from the Minister of Finance.

In the Paris Metal Market, there has been little or no variation: prices remain firm—Rolled charcoal iron, 400 frs. to 405 frs. the 1000 kilos.; rolled coke iron, 365 frs. to 375 frs. the 1000 kilos.; rod iron, 540 frs. to 550 frs. the 1000 kilos.; chains, 80 frs. to 81 frs. the 100 kilos.; iron weights, 545 frs. the 20 kilos.; iron wire, 92 frs. the 100 kilos. In Champagne, rolled iron is quoted from 430 frs. to 440 frs. the 1000 kilos., delivered in the railway station; pigs for forges, 190 frs. to 192-50 frs.; pigs for casting, 210 frs. the 1000 kilos.

In the Paris market, Lake Superior copper fetches from 328 frs. to 330 frs. the 100 kilos.; English copper, 320 frs.; copper plates for rolling, 315 frs. to 320 frs.; sheathing, 345 frs. to 350 frs. Zinc is quoted, at Rouen, at 65 frs.; the sheeting, in Paris, remains at 80 frs. the 100 kilos. Lead is firm at 68 frs. to 69 frs. in Paris; in bond, at Marseilles, 55 frs. English tin stands at 325 frs.

Rather a curious phenomenon is now taking place in France, which must evidently force the Government to proceed still further in the way of free trade. Many of the masters of the principal iron factories, especially at St. Dizier, find themselves in a most perplexing situation from the short supply of coals. Prussia, which hitherto furnished fuel so largely, and at such reasonable prices, has been obliged, doubtless in consequence of the enormous development iron manufacturers have recently taken in her own territory, to diminish the supply to France to one-fourth of what she formerly sent. The wants of Russia, occasioned by the war, and the cutting off her ordinary sources of supply by blockade, have contributed most materially to increase the production of Prussia, whose metal manufactures and inland trade have this year assumed proportions which will astonish the world, or at least the allies, when known. From the general prosperity of the kingdom, the rapidity with which masters and traders are making their fortunes, and the general ease in which the working classes even find themselves, it is evidently the interest of all to prolong the present situation of affairs, to remain neutral in the midst of a general war, and, in short, as they say here, *avoir un pied dans chaque camp, nager entre deux eaux ou manger à deux ratatines*. Into the political bearing of the question it is not the province of your correspondent to enter, but there can be no doubt that commercial men, both here and in England, look with great disgust at Prussia reaping such a rich harvest from the general misfortunes of Europe, and would cordially support the allied Governments in requiring her to take one side or the other—small consequence which, they may probably think. But to return to the short supply of coals. In addition to the reduction of the quantity from Prussia, supplies from Denain and D'Anzin have failed altogether; while the coals from the northern pits have risen afresh in price. As a natural consequence, coke has risen, and become scarce; and it will follow that all articles of manufacture will rise also. In the face of these difficulties, whatever coalowners and ironmasters may say, however they may clamour for protection to native industry, and exclaim against making France dependent on foreign nations for the supply of raw material, the Government will be forced to enter still further in the reduction of protection duties, if not driven to their abolition altogether. The wants of the nation are urgent, and it is no longer a question at what price French masters can supply them, but if they can do so at all. Partially, and at greatly increased cost, they may; but to furnish an abundant supply, at prices reasonable even in war times, is totally out of their power. To illustrate the truth of this proposition, and to show how inevitable free trade is in France, your correspondent will refer to the case of salt provisions. Under Colbert, the great protectionist, and creator of French industry, as he is still called, but whose reputation will doubtless suffer hereafter, although his claims to the gratitude of France in some things are uncontested, the French colonies drew their supplies of salt provisions from Ireland. In order to supplant the Irish, every effort was made to discover in France the most suitable salts, or at least one which could equal that with which Irish meat was prepared; and Colbert ordered the general intendants to favour as much as possible the growth of cattle. It is useless to repeat here how tyrannically was favoured the production of all things in which he took an interest. The trade with Ireland was prohibited; colonists and sailors were forced to eat very inferior provisions, often bad, and seldom wholesome, but always French; the diseases consequent upon such feeding grew, and swept away crews and colonies, all in order that Colbert's grand idea of making the mother-country independent of foreign nations might succeed. Although this deplorable error has been maintained until very lately, by laying prohibitory duties on foreign salt provisions, France has never been able to equal the quality of Irish provisions; and as for the quantity, it has been so small, that people have had to go without. Now, in spite of all the sacrifices that have been made, the supply has become so manifestly insufficient, that the goods are admitted at a very low rate of duty; and the French imperial navy is forced,

in part, to supply itself from Cork. The enlightened views of the present Government, and the known free trade tendencies of the Emperor, encourage a belief that the present crisis in the coal and iron trades will be dealt with liberally in the interests of all classes. What the results will be, it is impossible to say; but the rumours that are afloat point to a commonsense solution of the difficulty, that will gladden the hearts of our suppliers of raw material, and of our metal manufacturers also.

On the 24th inst., the Mint authorities will offer for sale some 60 tons of old sous, composed of bell-metal. It is expected that they will fetch a large price, and leave a handsome profit to the Mint, besides paying for coining of the same amount of new copper money.

The past year, although war one, and distinguished by a deficient harvest, and the failure in wine and brandy crops, shows no sensible diminution in railway construction: 923 kilometres (some 51 miles) were opened for public traffic; and 17,000 kilometres (about 1056 miles) in the course of construction.

PROJECTED RAILWAY TUNNEL BETWEEN ENGLAND AND FRANCE.

The construction of a tunnel for a railway beneath the bed of the Straits of Dover, with a view to unite the shores of England with those of France, and then with the entire European and Asiatic continents, is occupying much public attention, from the several projected plans which have recently been promulgated. Mr. Wm. Austin, many years in Messrs. Peto, Betts, and Brassey's establishment, has, since 1853, matured a plan which has been highly approved of by first-rate engineering talent. The plan proposed by him has for its object the accomplishment of a really permanent railway and enduring structure, extending from shore to shore, a distance of 22 miles, and connected at each end with the already constructed and future lines of railroad. It is intended to have a triple way of three arches, oval in form, and securely locked together by inseparable and indestructible masonry, constructed of approved imperishable material, impervious to moisture; and for such unavoidable leakage or collection of water as will occasionally occur, three efficient culverts will be provided to carry it to each shore, from whence powerful lift-pumps would convey it into the sea. The fall is to be from the centre towards each shore, and it is calculated that the crown of the tunnel will have a thickness of chalk of 60 ft. below it and the ocean bed, at the deepest point, which does not exceed 140 feet below the tidal level, as proved by soundings. There will be three double lines of railway (three each way), which will be ample for ordinary, goods, traffic, and express trains. Ample space is afforded for all necessary pathways, and the telegraph wires will be laid in the centre, on a new principle of economy and ready access. The tunnel, by its length, will thoroughly ventilate itself, but should it prove necessary, three or four, or more, air-shafts can be readily constructed, the upper portions forming light-houses, or refuge in case of shipwreck, and for signalling ships in the Channel. The cost is estimated at £6,000,000, and the time for construction seven years. The whole of these works are proposed to be carried out in connection with Mr. William Hutchison's patent, which we have so often noticed in our columns, for converting into an indestructible building material river or sea sand, shingle, chalk, and other soft and comparatively worthless substances. As it is to be geologically assumed that the stratum to be cut through is chalk, Mr. Austin proposes to construct his three roadway-arches of large blocks of masonry, bound together in a peculiar manner, (illustrated by a diagram in their description in the *Mining Journal* of Dec. 1), such blocks to be formed from the excavated material, carried to the indurating works (to be constructed at each end), and re-conveyed to the portion under completion, ready to be placed *in situ*. As these blocks would occupy the space of 40 or 50 bricks, be rapidly formed in the soft state of the material to the shape required, and quickly indurated to a degree which the chisel will scarcely touch, it is expected the work would proceed with a rapidity hitherto unknown in the history of tunnelling, and that the time named by Mr. Austin will be ample for its completion.

IRON ROADWAYS IN LONDON.

We have on various occasions in the columns of our Journal recorded the several suggestions which have been made for the employment of cast-iron, in lieu of granite, for the purpose of road paving. In our columns of Aug. 16, 1851, May 22, 1852, and Nov. 10, 1855, the subject was fully entered into—the plan of Messrs. Kennard, of Upper Thames-street, submitted to the Commissioners of Sewers, which they were prepared to lay down at their own expense in any leading thoroughfare—that of Messrs. Allen, of Spring Bank Iron-Works, Glasgow, who had laid down a portion of iron pavement in that city. As long back as 1836, an experiment of the kind was made on Blackfriars Bridge, and before that a foot paving at the corner of Old-street and the City-road. Iron pavement, like every other mechanical invention, is claimed as of United States origin, which the above dates refute, for it was not until Sept., 1853, the subject was heard of there, when a trial was made in Boston, on a plan by Mr. W. D. Terry. The Commissioners of Sewers of the City of London determined last year to adopt an iron roadway, on a plan patented by General Knapp, and which was commenced laying down in Leadenhall-street on Wednesday, by the contractors, Messrs. Crook and Son, Tower Royal, London, Messrs. Ransomes and Sims, of Ipswich, being the founders, and Mr. W. Haywood, of Guildhall, the engineer. The pavement will consist of circular cast-iron rings, about 12 inches in diameter, and 6 inches deep, divided into seven compartments, one in the centre, and six surrounding it, rendering these apertures sufficiently small to prevent the catching of the hoof of a horse. The upper edge of the ring, and all the partitions, are thickly indented with semicircular depressions, about an inch in depth. A projecting hub on one side of the ring, and a corresponding depression on the other, fit together, and thus lock the whole roadway into one solid framework. The indentations on the upper edge of the frame, with the gravel employed in filling the whole to the surface, secure a good foot hold for the horse, and the advantages claimed for this pavement are—economy in wear and tear, great facilities for removal and relaying, absence of dust in summer, excess of mud in winter, not made slippery in the most severe frosts, and not productive of that noise which is so annoying in granite paving. If the pavement answers these anticipated capabilities, it is the intention of the Commissioners to pave in like manner all the principal thoroughfares of the City.

THE IRON TRADE.—The following weekly statement has been forwarded to us, from Glasgow, by Mr. Thomas Edington, showing the principal new orders for castings, machinery, rails, &c., as far as ascertained by him to be in the iron markets of Great Britain and Ireland:—1300 tons rails for the Great North of Scotland Railway. Large quantities of cast and wrought-iron, aqueducts, &c., will be required during the next three years for No. 1 of Blairhulachan contract of the Glasgow Corporation Water-Works. Eleven offers were given in for said contract on Jan. 3, of which Mr. Bagnall's, of Cork, was the lowest. A gold crushing machine for Australia, 8-horse power high-pressure engine, with boiler and sawing machine, a boiler plate bending machine, a sugar mill for London.

THE COAL TRADE.—Messrs. Herbert and Hindley, of Liverpool, inform us, that the total export of coal from Liverpool to all foreign ports during the month of December, 1855, was 29,977 tons; from Cardiff, in the same month, 45,517 tons; from Swansea, 10,966 tons; from Newport, 10,261 tons; from Newcastle, 97,708 tons, and 7713 tons of coke; from Sunderland, 32,894 tons, and 1961 tons of coke; from Hartlepool, 29,046 tons, and 1125 tons of coke; and from all the Scotch ports, 23,333 tons.

THE COAL TRADE OF THE WEAR.—The half-yearly vend of coals on the Wear was sworn to by the staithmen of the various coalowners before the River Commissioners to-day, and showed the total number of chaldrons shipped from June 30 to Dec. 31 to be 403,723. This is the largest quantity of coal that has ever been sent from the Wear during six months, and forms a total for 1855 of 713,557 chaldrons, being an excess of 7386 chaldrons on the shipments of 1854, which has hitherto been the greatest of any recorded at that port.

MINERAL WEALTH OF THE LAKE SUPERIOR DISTRICT.—A correspondent, writing from Sault St. Marie, says—"It is but a few years since that the country bordering on Lake Superior was considered a 'wild waste,' but now its mines are looked upon as the richest kind, not in gold and silver, but in copper and iron. The yield of copper for the year 1855 will be about 10,000,000 pounds—worth, at present price, over \$1,600,000. It is also the greatest iron ore region in the world; it is found in greater or less purity in every part of that section of country. Boulders of iron are also found scattered over a vast extent."

MINES AND MINING (NEW SERIES).—No. I.

BY EVAN HOPKINS, C.E., F.G.S.

In looking at the annual progress of mining, as recorded in the *Mining Journal*, it might be supposed that there were no just grounds for the severe complaints that are commonly made by the public and the press on the deceptive system in which this division of our industry is often got up and carried on; and that capitalists had only to take note of the dividend and progressive mines (annually enumerated by different parties in their advertising lists) for their guidance, and make their purchases accordingly. But how very different are the facts, deceptive the representations, and how dangerous such advice is to the uninitiated. It is true that the copper, tin, and lead mines of the United Kingdom, including those in the north of England, have paid in dividends during the last year in round numbers about 400,000*l.*; and the foreign (wrought by English companies) nearly 210,000*l.* However, when we compare these profits, which are derived from the few productive mines, with the heavy losses incurred in the numerous unproductive concerns, and from deceptive reports and bad management, together with premiums paid for worthless shares, in home as well as foreign specie, the magnitude of the negative picture becomes very alarming, and fully justifies the severity of the press, and the necessity of adopting some mode by which the evils which beset mining speculations may be corrected. Indeed, it is now publicly acknowledged that integrity, judgment, and honest mining undertakings (with the exception of a few), no longer exist, and that such principles are incompatible with the English mining speculations of the present day.

Unfortunately, the popularity of the managers of mining speculations does not now depend on their integrity, or judgment to carry on the concerns placed under their charge, but rather on their dexterity in creating excitement in the mining market. When once they fail in keeping shares at a premium, they are immediately condemned, however good their conduct may be.

To make a report on a mine, or on the prospects of any given undertaking, means, according to the present system of getting up mining speculations, the concoction of a document which would cause excitement, to enable one portion of the public to obtain money from the other. This system of deception is, I regret to say, encouraged by men of apparent respectability, and is hoodwinked, also, by many of the shareholders who are in the secret, and who job in the market.

It is by means of these iniquitous proceedings that jobbing managers of companies preserve their post, sacrifice the best of agents, ruin thousands, bring disgrace on mining enterprise, and also lower the character of the nation for integrity and judgment. If the shareholders of companies neglect their own interest, allow the managers to do what they like with their money, appropriating their property, is it not to be wondered at that foreigners should come here to do the same thing, and laugh at the apathy and credulity of the English public. The amount of money which has during the last few years changed hands, from excitement created by false representations in the home and foreign mining speculations, is enormous, and is a disgrace to the nation.

NATIONAL BRAZILIAN MINING ASSOCIATION.

In another column will be found a report from Mr. Edward Oxenford, in reference to the mining property of the National Brazilian Association. We regret to find the position in which that gentleman appears to have been placed by the non-payment on this side of certain bills for wages and expenses; but, notwithstanding the apparent difficulties, we much mistake the character of Mr. Oxenford if he allows the loss of so valuable a property as the Cocais Mine to pass into the hands of the Brazilian proprietors. The falsehoods of this company, mining as well as agricultural, are very extensive; and in reference to the latter we are enabled to subjoin a report on the Rotula estate, which will be read with considerable interest, by all concerned. A specimen of the coal found on the confines of the Rotula estate may be seen at the office of the association. The report is written by a gentleman well conversant with the property, and is addressed to Edward Oxenford, Esq., in Brazil.

Cuia de Sabara, Nov. 22.—Having lived at the Fazenda de Rotula for 5*½* years, in charge of the same, during which time I regarded with much attention the many products of peculiar interest to the European, I beg now to lay before you a report, according to your request, of such as most prominently attracted my attention, together with a brief description of the same estate. The Rotula estate is about 2*½* miles long, by an average of 1*½* miles wide, and bounded from north to south by the River Sipo, of which it has a frontage on the eastern side of about 6*½* miles; a piece of land of about 600 acres gives it a western frontage. The opposite side of the estate is bounded by a valuable ridge of richly wooded limestone mountain, branches of which traverse the estate in such a manner that four large, the estates may be formed, each partaking of a fair proportion of the valuable properties of the estate as a whole—viz., wood, pasture lands, water-power, and salt-petre mines, with good roads through the whole. The woods are numerous, extensive, and well spread over the estate; the timber most valuable for size and quality, no way inferior to the prized woods used in Europe for the most delicate cabinet work. Barks for tanning are numerous, valuable in quality, and abundant, either for tanning the finest leather or the stoutest sole. The medicinal barks are of the most esteemed qualities, such as various qualities of the Peruvian bark, cascara, and many others used by the natives medicinally, but which I cannot name with any certainty. The medicinal plants which I know, and which are indigenous to the place, are pica-chana, rhubarb, jalapa, sarsaparilla, senna, annatta, vanilla, muc vomica, stramonium, castor oil berry, turmeric, ginger, &c. The indigo plant grows wild and plentiful, and is manufactured by the working classes to dye their ordinary clothes. With the cultivated plant, and people well versed in its manufacture, an article might be produced which would equal that from India. The salt-petre mines are found in many parts of the estate; some have been worked to great advantage; the adjuncts necessary to the manufacture abound close to the mines. The salt-petre is first-rate in quality, and has a ready sale. The pasture lands are excellent for animals, working cattle, milch cows, and for fattening, and this latter with little trouble, as salt-licks are numerous in the pastures, which are well watered. The agricultural properties of the estate speak for themselves. I have planted and know the results in many parts; in fields of from 100 to 300 acres the average has never been less than 140 bushels to 1*lb.* of plant of Indian corn. In making these averages, I have found parts of the fields which have given as high a produce as 200*lb.* Cotton is a staple article, of good colour and fibre, yielding two crops for each of planting. Arrow root, cassava root, rice, and French beans, all yield well. Sugar cane can be cultivated to any extent, machinery and conveniences for the manufacture of sugar and rum on a large scale being on the spot, and in good order. With moderate prices, and an average season, this is a lucrative branch of farming labour. The soil and climate are well adapted for this plant. All European vegetables, both for the use of cattle and man, thrive well, giving large crops, and no risk from frost. Old documents show that the River Sipo was worked many years since for diamonds, with good results. Since the Government opened the trade in precious stones, the river, from being private property, has not been worked for a distance of 80 miles. I have been informed that diamonds have been found at the Riacho, one of the tributaries of the Sipo, and I have seen some with people whom I know to have worked near the junction of the Rivers Sipo and Pedras, about one mile below the boundary of this estate. Gold has been found on the Rotula estate, and without doubt might be found in remunerative quantities, if proper explorations were undertaken. An engineer is surveying the Rio das Velhas, with the view of testing its navigable capabilities. No doubt can be entertained as to the great importance to the Rotula estate of the accomplishment of so desirable an object. A cotton factory is established on the borders of the estate, with improved English machinery, and with good results. Plough cultivation can be carried on with great advantage, so that with the prospect of river navigation, improvements in the roads taking and about to take place, the great increase in the value of many articles which the estate produces and possesses, I think that, with British capital and enterprise, it might become the nucleus of a thriving neighbourhood.—GEORGE DENBY.

MINING NEWS FROM CALIFORNIA.

Grass Valley, Dec. 3, 1855.—70 tons of gold-bearing quartz, raised from the ledge on Allison's Ranch (Grass Valley), produced \$30,000. This ore was ground and amalgamated at the Gold Hill mill (Aqua Fria Company) for 8*½* per ton. The owners of this ore are five Irishmen and one American. This is after the rate of \$128 57*½*, or 8*½* 10*½* 4*½* per ton. Quantity of gold, 27 ozs. per 2000 lbs. of ore.

From 120 tons of gold quartz rock there has been produced \$5000, equal to \$41 6*½* per ton on 2000 lbs., or say 8*½* 12*½* 1*½* per ton. Quantity of gold per ton, 2 ozs. 12 dwts. 12 grs.: this is from another ledge.

Bear Valley, Mariposa County, Dec. 1.—From the mines late in the possession of the Nouveau Monde Company the late statement has been made, and the amount per ton even somewhat understated. This ore is being reduced, and the Osceola mine in Bear Valley, belonging to the Messrs. McKay.

Marble Springs Mine.—The only fresh item I have to give you is that Mr. Wheeler has engaged a German, Perito, to operate on the tailings, on a monthly salary and a share of net returns. The gold collected so far, I understand, shows \$100 per ton of tailings, and he expects some of these tailings will yield as high as \$200 per ton, principally from amalgam. Probably the action of the arrastre, and I fancy if assisted by re-agents for the decomposition of the sulphurates, will save a still further portion of the precious metals. In many instances, they are returning to the Mexican arrastre.—SAN FRANCISCO, Dec. 4.

NOUVEAU MONDE GOLD MINING COMPANY.—Mr. J. H. Clement begs to inform the shareholders of 1851-52-53-54, that he has received the following confirmation respecting the letters that were published in the *Mining Journal* of Jan. 5:—“*One Mine, Bear Valley, Mariposa, California, Dec. 1.* On Nov. 20 I informed you of the change in the condition of the Merced Mining Company's affairs, and the result of 20 tons crushing on my own account. That result was even understated, for I find on my return here that the stuff from the stampers was not included, as also a small quantity of amalgam now in the possession of Mr. McKay. I have learned from Mr. McKay his bill for one month, with the privilege of continuing, and on Monday, the 30, I commence crushing. I have at the mill 35 tons; at the mine, 50 tons more, spalled, and as there are seven men at work at the mine, I expect to crush during the month 150 tons. I have no doubt but that the yield will equal my last advices.—Smyth Clark.”—“The stuff from the stampers is the gold that gets in between the joints of the bed-plates and framework of every mill that grinds gold ore. This by ignoramus is supposed to be placed there to deceive, and was stated so to have been in the report to the Quartz Rock Gold Mining Company. In this case it was not found till days after the operations, as appears from the extract of Mr. Smyth Clark's letter.—J. H. CLEMENT: Kensington, Jan. 18.

GREAT CAMBRIAN MINING AND QUARRYING COMPANY.—Sir William Page Wood, one of the Vice-Chancellors, has appointed the 24th inst. for creditors to come in and prove their debts.

THE EXTRACTION OF GOLD FROM QUARTZ.

We visited the works of Mr. Charles Low, at the Ordnance Wharf, Rochester, on Tuesday, for the purpose of witnessing his operations in the reduction and extraction of gold from quartz. Mr. Low is a practical copper smelter, and although he has only recently patented his method of operating upon ores for gold, it is a subject that has occupied his attention for many years. The great principle which Mr. Low adopts is that pursued in copper smelting. The first operation consists in calcining, to free the ore as much as possible from sulphur, which has been the cause of the systems hitherto adopted failing, through the mercury losing its effect by combining with the sulphur. After the ore is calcined, a quantity of water is thrown upon it, by which means the hydrogen combines with the remaining quantity of sulphur, and altogether frees the ore from it. So far these operations are somewhat similar to the method adopted for smelting copper ores.

The next process is the part specially claimed by Mr. Low. After a long residence in Wales, Mr. Low felt satisfied that the only method to extract all the gold from the quartz would be to liquify it, and for this purpose the difficulty to be overcome was to obtain a flux at such a low price that the gold in this country could be obtained at a commercial value, and in this important point Mr. Low appears to have completely succeeded. The calcined ore is put into a reverberatory furnace, with a small quantity of limestone, lead ore, and scrap iron. The quartz, when reduced to a liquid state, is skimmed by running the slag into moulds, which can be used for many purposes, more particularly for draining. The gold being left at the bottom of the furnace, is drawn off by a tap at the opposite side to where the slag is obtained.

Many have supposed that Mr. Low has been hitherto engaged in assaying small quantities; but, although the works at present can be only called experimental, 1 ton of ore is operated upon every time the furnace is charged, and one furnace only is capable of doing upwards of 50 tons per week, so that in a very short time the question will be decided beyond a doubt whether gold can be profitably obtained in England. It is fully proved that the total cost of reduction, including fluxes, fuel, labour, &c., will not exceed 9*½* per ton; and there are thousands of tons of ore in Wales, similar to that being now tested, which can be procured at 3*½* per ton.

According to the specification filed by Mr. Low, it appears that 100 lbs. of lime is put in the furnace with 1 ton of the calcined ore, or matrix. The door is then to be opened, and about 100 lbs. of lead, litharge, or galena (preferring lead), are to be thrown into the furnace, together with about 50 lbs. of scrap iron, 20 lbs. of peroxide of manganese, or manganese in any other state of oxidation, and two or three shovelfuls of small coal, or other carbonaceous matter. The furnace is then to be closed, and the heat raised till the whole mass is fused, which will be found to take about three hours. It is not necessary to run off the metals remaining at the bottom of the furnace at the conclusion of the first charge; but another charge of the same quantity of roasted ore and lime may be placed in the furnace, only half the quantity of lead, iron, &c., being used. In this manner four or more charges may be fused before running off the metal, which is done through the tap-hole into a mould. The gold contained in the lead may then be separated by cupellation, or otherwise.

WEEKLY LIST OF NEW PATENTS.

APPLICATIONS FOR PATENTS, AND PROTECTION ALLOWED.

T. Chaffer: Machinery for sawing and cutting slate, stone, coal, salt-rock, or other minerals.—A. M. Perkins: Apparatus for generating steam.—J. Gray: Azimuth and amplitude instruments.—J. Cooker: Manufacture of wire.—J. G. Jennings: Boring pipe and suction valves of pumps.—J. M. Précaud: India rubber springs.—A. V. Newton: Machinery for manufacturing bolts.—M. Kennedy, and T. Eastwood: Improvements in pump buckets, which improvements are also applicable to lift pumps, air pumps, and all similar apparatus.—J. H. Johnson: Furnaces for steam-boilers and other heating purposes.—E. Rowell: Manufacture of blocks or slabs for paving or building purposes.—D. Dick: Regulator for gas.—T. Cowburn, and G. W. Muir: Improvements in steam-boilers and in valves and parts connected therewith.—C. E. Hoffmann: Rotary steam-engine.—A. Tolhansen: Railway axle boxes.—D. McCullum: Electric telegraphs.—J. Robinson, R. Cunliffe, and J. A. Collet: Improvements in locomotive steam-engines, and in springs for locomotive steam-engines, and other purposes.—T. F. Utley: Mode of applying fusible plugs to steam-boilers.

ENGLISH AND AMERICAN PATENTS.—In the *Mining Journal* of May 5 last, we described a new process for puddling iron, patented by Mr. James Nasmyth, of steam-hammer eminence, and consisting of a means of forcing jets of steam or water upwards through the molten metal, by which the carbon, sulphur, and other impurities are removed, and the iron rendered more perfect and homogeneous. By a communication from Messrs. Merrick and Sons, patent agents, of Philadelphia, we learn that Mr. Nasmyth applied for an American patent through them, but which was refused, on the ground that it conflicts with an English patent granted to Messrs. Guest and Evans, in 1840. It is not often we have to eulogise the impartiality of our trans-Atlantic brothers in mechanical or scientific matters, but this act of the Philadelphia Patent Office is highly to the credit of its officials. Messrs. Merrick and Sons also honourably acknowledge that Mr. Nasmyth's plan is far more simple, and less liable to derangement, than one previously taken out in the United States.

COATING IRON.—Messrs. Morewood and Rogers have invented an improved method of coating sheets of wrought-iron. The sheets are to be first cleaned by dilute acid in the ordinary manner, then covered over with some one or more of the following substances in a solved or melted state—viz., turpentine, resins, lac, gums, oil, grease, gelatinous or bituminous matter. Sheets so prepared will be ready to be soldered without being first coated with tin.

ELECTRO-COATING IRON.—Mr. F. Pulte has patented the regulation or modulating of the intensity or quantity of the electric current from the battery proportionately to the surfaces of the iron to be coated, thus causing the zinc to be deposited upon the iron in the smallest possible particles or atoms, thereby securing a perfect adhesion of the zinc to the iron.—2. The employment of sulphate or hydrochlorate of zinc, or double or treble salts of the same, with potash, soda, and ammonia, for the purpose described.—3. The rinsing of the exhausted fluid from the bath in the battery, and that from the battery in the bath.

SMOKE CONSUMING FURNACES.—Mr. C. C. J. Guffroy has patented a steam-engine furnace for the consumption of the smoke, of novel construction, consisting of an apparatus in which, after the fuel has been once lighted, the fresh coal is placed on the incandescent mass, and the gaseous products from the unconsumed fuel are made to pass through it. The combustion is assisted by jets of air passing into the fuel from nozzles or other apertures. Fire-bars there are none, but there is an opening provided in the bottom of the apparatus from whence clinkers, clinkers, &c., may be removed. A partition plate is added in the upper portion of the furnace, to prevent the smoke and gases emitted from the fresh fuel from passing off into the flues, without first traversing the incandescent mass; and this also may, in certain cases, have apertures in it for the admission of jets of air, to support combustion.

“COOKING-UP” A MINE.—At the Tavistock County Court, Capt. John Pomery was sued by John Lukye for 8*½* per cent., in payment of labour performed. The defence was, that defendant was not a shareholder in the mine at the time plaintiff was employed, and that he (Pomery) was engaged by a gentleman residing in Threadneedle-street, London, to “cook up” a mine, and against whom the plaintiff ought to have brought his action. Mr. Robins called as a witness John Pomery, the defendant, who stated that he was never a shareholder in the mine in question. His Honour: “Is there such a mine as South Wheal Robert in existence?” Defendant: “No—no house has yet been erected—the mine has to be brought out.” His Honour (with a knowing smile): “To be brought out in London, I suppose.” (Laughter.) Defendant: “Yes; by London gentlemen (continued laughter). The plaintiff was employed by me to do certain work, as also Peter Comer and my son, which had not been paid for, because my principal had not remitted the money from Threadneedle-street.”

At the Penzance County Court, Mr. Henry Viner sued Mr. J. Permeau, to recover 24*½* per cent. It appeared that Mr. Viner, amongst other mining transactions, instructed Mr. Permeau to purchase fifteen shares, in Trenow Consols. There were calls due on the fifteen shares, of which ten were to be paid by defendant, and the other five by plaintiff. Defendant had neglected to pay the calls, and thus rendered them unavailable to the plaintiff; he, therefore, returned the shares, and sought to recover the amount paid for them, which at 2*½* per share would be 20*½*. Plaintiff also claimed 4*½* per cent., for expenses incurred. The Judge having summed up the case, the jury gave a verdict for the plaintiff for 20*½*.

METAL TRADE.—A TRADESMAN of independent means, and of active and industrious habits, who for many years has been extensively engaged in the metal trade, is DESIROUS of an AGENCY, chiefly to occupy his time, considers that he might make such terms as would answer the purpose of a respectable smelting company, being well known to most of the large consumers in the town of Birmingham, and having premises centrally situated. The most undesirable reference will be given.—Apply, by letter only, to “X. Y. Z.” *Mining Journal*, office, 26, Fleet-street, London.

WHEAL UNY.—At a QUARTERLY GENERAL MEETING of the adventurers in Wheal Uny, held at 69, Lombard-street, London, on Tuesday, the 13th January, 1856.

PHILIP L. HINDS, Esq., in the chair, The following resolutions were severally moved and seconded, and carried unanimously:—

That the statements of accounts, together with Capt. Rowe's report, be received and adopted; and that they be printed and circulated among the adventurers.

That a call of 5*½* per cent., payable in 14 days, be, and the same is hereby declared to be, made upon the adventurers.

That P. L. Hinds, William Mumt, and John Spalding, Esqrs., and Dr. Kennedy, be re-appointed the committee of management for the next three months.

That the thanks of the meeting be presented to P. L. Hinds, Esq., for his courteous conduct in the chair the day, and to the committee generally, for the very able and efficient manner in which they have conducted the working of the mine during the past three months.

JAMES HUTT, Sec.

69, Lombard-street, London.

RAILWAY REFORM.—At a PRELIMINARY MEETING of

gentlemen interested in railway property, it was resolved:—That it is highly expedient to call a public meeting of railway shareholders, to take into consideration the seriously depreciated value of their property; and especially to consider a plan then to be proposed, which it is confidently believed will arrest further depreciation, and speedily place railway property in a sound and healthy condition. That such meeting be called by advertisement in the public journals, and the notice convening such meeting be signed by the chairman on behalf of those present.

In accordance with the above resolution, RAILWAY SHAREHOLDERS are earnestly invited to MEET at the London Tavern on Tuesday, the 22d day of January inst., at One o'clock precisely; and, in the meantime, shareholders desirous of aiding in this great work are requested to forward their names to the committee, at the London Tavern.

WILLIAM MALINS, Chairman.

GEOLOGY.—KING'S COLLEGE, LONDON.—PROF. TENNANT, F.G.S., will give a COURSE OF LECTURES ON GEOLOGY, to COMMENCE on Friday, the 25th January, at Nine o'clock a.m., and to be continued on each succeeding Wednesday and Friday at the same hour.

R. W. JELF, D.B., Principal.

TO BE LET, for such a term of years as may be agreed on, the LONG BENTON COLLIERIES, near Newcastle-upon-Tyne, the property of the Right Hon. the Earl of Carlisle. At this colliery, the High Main Seam, which has been securely tubed off, and the shafts are sunk to the Low Main Seam, which has been recently extensively opened out. The engines, screens, and other stock upon the colliery may be taken at a valuation.—Further information can be obtained on application to Mr. LIDDELL, Benton Grange, near Newcastle-on-Tyne.

By order, J. MAY, Sec.

CLEW BAY COPPER AND SULPHUR MINING COMPANY.—HOLDERS OF SCRIP are earnestly requested to MEET the Committee, at the offices, 38, Cannon-street, City, on Tuesday, the 22d January, at Twelve o'clock precisely, to discuss the present most urgent and important position of the company's affairs.

By order, J. MAY, Sec.

WHEAL WILLIAMS MINING COMPANY.—NOTICE TO CREDITORS.—ALL PERSONS having any CLAIM, or DEMAND, against this mine, or the adventurers, are hereby required, within one month from the date hereof, to FURNISH me with an ACCOUNT THEREOF in writing, in order that the same may be investigated, and, if correct, paid; and unless such claims are made, the assets of the company will be appropriated, and the adventurers will not hold themselves liable for any claim or demand whatsoever after the expiration of the above period of one month.

Dated this 12th day of January, 1856, 117, Bishopsgate-street, Within, London.

WHEAL WILLIAMS MINING COMPANY.—NOTICE TO CREDITORS.—ALL PERSONS having any CLAIM, or DEMAND, against this mine, or the adventurers, are hereby required, within one month from the date hereof, to FURNISH me with an ACCOUNT THEREOF in writing, in order that the same may be investigated, and, if correct, paid; and unless such claims are made, the assets of the company will be appropriated, and the adventurers will not hold themselves liable for any claim or demand whatsoever after the expiration of the above period of one month.

BRAZILIAN PERNAMBUCO RAILWAY COMPANY.

Capital £1,200,000.

Guaranteed 7 per cent per annum by the Imperial and Provincial Governments.

OFFICES OF THE COMPANY.—GRESHAM HOUSE, OLD BROAD STREET.

Prospectuses and forms of application for shares may be had at the offices of the company; at the brokers of the company, Messrs. LAURENCE, SON, and PEARCE, Auction Mart; Messrs. JOSHUA HUTCHINSON and Sons, 39, Lothbury; and at the bankers of the company—

LONDON Messrs. Heywood, Kennards, and Co., Lombard-street.
LIVERPOOL Messrs. Arthur Heywood, Sons, and Co.
MANCHESTER The Bank of Manchester.
EDINBURGH and GLASGOW. The Bank of Scotland.

The SHARE LIST will NOT BE KEPT OPEN after Saturday, the 26th Jan. inst.

THIRTY-SEVENTH REPORT OF THE LONDON JOINT-STOCK BANK.—At a GENERAL MEETING of the shareholders, held at the Banking-house of the company, in Princes-street, Mansion-house, on Thursday, January 17, 1856.

GEORGE HOLGATE FOSTER, Esq.—CHAIRMAN.

WILLIAM JAMES LANCASTER, Esq.—DEPUTY-CHAIRMAN.

DIRECTORS.

| | |
|-------------------------------------|---------------------------------|
| WM. BIRD, Esq. | ARCHIBALD HASTIE, Esq., M.P. |
| WM. BLOUNT, Esq. | WM. J. LANCASTER, Esq. |
| Alderman Sir GEORGE CARROLL. | SIR JOHN M'TAGGART, Bart., M.P. |
| WM. MILLER CHRISTY, Esq. | GEORGE MEEK, Esq. |
| Alderman Sir JAS. DUKE, Bart., M.P. | AMBROSE MOORE, Esq. |
| PHILIP WM. FLOWER, Esq. | JOHN TIMOTHY OXLEY, Esq. |
| GEORGE HOLGATE FOSTER, Esq. | JOHN JOSEPH SILVA, Esq. |
| FRANCIS BENNETT GOLDNEY, Esq. | GEORGE TAYLOR, Esq. |
| WM. ORMSBY GORE, Esq., M.P. | THOMAS TILSON, Esq. |
| HENRY GRACE, Esq. | |

MANAGER—George Pollard, Esq.

SOLICITORS—Messrs. Clarke and Morice.

The following report was presented:—

The directors have again the pleasure of presenting to the shareholders the accounts of the Bank, which show that the net profits realised during the past six months, and the balance of £35,123 9s. 2d. brought forward on the 30th of June last, amount to £80,355 0s. 6d.

By this result, the directors are enabled to declare a dividend at the rate of £12 10s. per cent. per annum, and a bonus of 11s. 3d. per share, and to carry the sum of £105 0s. 6d. to the credit of the guarantee fund, which now amounts to £160,833 13s. 1d.

The seats in the direction which became vacant on this occasion are those of Wm. James Lancaster, Esq., Wm. Blount, Esq., Sir John M'Taggart, Bart., M.P., John Joseph Silva, Esq., and Alderman Sir George Carroll, all of whom offer themselves for re-election.

The dividend and bonus, free from income tax, will be payable on and after Friday, the 25th instant.

The preceding report having been read to the meeting by the secretary, a dividend for the half-year ending the 31st Dec. last, after the rate of 12 1/2 per cent. per annum, and a further division of 14s. 3d. per share, out of the net profit of the year ending above, were declared by the Chairman.

Resolved unanimously.—That the report now read be received, and that it be printed for the use of the shareholders.

The following directors having retired by rotation, were unanimously re-elected, viz.—Wm. J. Lancaster, Esq., Wm. Blount, Esq., Sir John M'Taggart, Bart., M.P., John Joseph Silva, Esq., and Alderman Sir George Carroll.

Resolved unanimously.—That the thanks of the meeting be given to the directors, for their assiduity and success in conducting the affairs of the Bank.

Resolved unanimously.—That the heartfelt thanks of the meeting he also given to George Pollard, Esq., for his able management.

GEORGE HOLGATE FOSTER, Chairman.

A. GIBBON, Sec.

LONDON JOINT-STOCK BANK.—Liabilities and Assets, Monday, Dec. 31, 1855.

Dr.—Capital paid up—viz., 60,000 shares, at £10 each £600,000 0 0

Amount due on the Bank 6,241,594 15 9

Amount of Guarantee Fund, June 30, 1855 £154,373 0 8

Six months' interest on do., at 6 3/4 per cent. p. a. 2,375 11 11=

Undivided profit for the last half-year 35,123 9 2

Amount carried to profit and loss account 92,106 9 4

Total £7,129,574 6 10

Cr.—Exchequer Bills and India Bonds £ 810,925 11 8

Cash, loans, bills discounted, and other securities 6,290,073 15 2

Building, furniture, &c., in Princes-street £30,200 0 0

Building, furniture, &c., in Pall Mall 8,375 0 0=

Total 38,575 0 0

PROFIT AND LOSS ACCOUNT.—For the half-year ending Dec. 31, 1855.

Dr.—Current expenses, proportion of building expenses, directors' remuneration, bad debts, income tax, &c. £23,679 7 8

Amount carried to Profit and Loss, new account, being rebate of interest on bills discounted not yet due 23,196 10 4

Amount transferred to credit of Guarantee Fund, in addition to above amount of £160,748 12s. 7d.

Dividend account, for payment of half-year's dividend, at the rate of 12 1/2 per cent. per annum, upon £60,000 paid up capital upon 60,000 shares 37,500 0 0

Dividends for payment of a bonus of 11s. 3d. per share 42,750 0 0

Total £127,230 18 6

Cr.—Balance brought down 292,106 9 4

Undivided profit brought forward from last half-year 35,124 9 2

Total £127,230 18 6

WHEAL CONSTANCE SILVER-LEAD MINE. IN THE PARISH OF NEWLYN, IN THE COUNTY OF CORNWALL.

Divided into 1024 shares, and conducted on the "Cost-book PRINCIPLE."

Committee to be elected at the first meeting of shareholders.

MANAGING AGENT.—Capt. PUCKEY, St. Blazey, Cornwall.

SECRETARY.—Mr. W. Charles.

OFFICES.—27, AUSTINFIARS, LONDON.

This mine is situated in the parish of Newlyn, near Truro, Cornwall, and is held under a lease for 21 years, granted by the Bishop of Exeter and the Ecclesiastical Commissioners; at a royalty or dues of one-fifteenth. The grant is very large, its area being three quarters of a square mile. The district in which this mine is situated is the most prolific for silver-lead ores in the County of Cornwall. It is bounded on the east by the celebrated East Wheal Rose Mine, which has produced silver-lead ores to the value of upwards of £600,000 and has paid the fortunate shareholders about £300,000 sterling in dividends. Immediately adjoining on the west are the "Shepherd's Mines," which were extensively worked by the late Sir C. Hawkins, Bart., who erected smelting works on the mines and realised immense profits therefrom. On the south it adjoins the South Cargill Mines.

Most of the lodes of these mines pass through the sett, and the Wheal Arthur lode crosses at right angles no less than six lodes, giving six important junctions, in addition to which there are several junctions formed by the east and west with counter lodes, and as the lodes are embedded in such a congenial formation for the production of silver-lead ores, coupled with the mineralogical features described, it is considered by eminent practical men that there can scarcely be a doubt of success when the mine is properly opened up.

There is an excellent 40 ft. cylinder steam-engine erected, and the mine sunk to the depth of 9 fms. below the 50 ft. level, in which level the lode was more productive than in those above, having arrived at that point where the lodes generally prove productive in the locality. All the necessary buildings and erections for carrying out the works on a large scale are on the mine, as described in the reports. The works were carried out by a company divided into 512 shares, 338 of which were held by one individual. More capital was then required, and he decided on reducing his interest; the minority of shares could not help themselves, and were obliged for a time to suspend operations, until arrangements could be made for this subdivision. This company expended on the works £10,310, including £1881 realised from the sale of lead ores.

It is considered by competent judges that the value of the plant and work done available for carrying on the future operations of the mine are worth full £7000 apart from the time it would take to bring the works to their present state. The proprietors have decided on giving up half of their interest on the following terms—viz., to double the number of the shares, each old proprietor taking a 1024th share, in lieu of the 512th which he held before; and it has been decided to sell the 512 shares created by this arrangement at £4 per share, which will realize £2048. This sum is not to be paid as a premium to the other holders, but as follows:—First to pay off the debt, which amounts in round numbers to £430, and the balance of £1618 to be applied to the working of the mine. For this sum the incoming shareholders will have the value in work done and materials of £3500; without allowing anything for the prospects of the mine, or in other words, the opportunity of joining a mine in one of the best localities, with a great deal of work done, a most respectable local proprietary, and practical management of the first order, at less than costs. Since the suspension of the works, the operations of its neighbours have been actively prosecuted, and the following extract from the City Article of the *Mining Journal* appeared on the 22d of December:—"At East Wheal Rose, splendid prospects are being developed. Most of the shafts are cut down, and new levels opening, from which immense quantities of ore will be raised. In the old workings, when lead was at a very low price, each level was calculated to produce £30,000, and now that lead is at a high price, and the levels improving in depth, it is presumed they will produce a great deal more. The return for November and December will be about 700 tons, and there is little doubt, in the ensuing year that the mine will raise more lead ore than all the mines in Cornwall put together, and that large sums will be divided amongst the shareholders." The prospects of East Wheal Rose Mines have trebled the price of lead.

The advantages of Wheal Constance must be apparent from what has been stated, and it is resolved to commence the work, as soon as possible. A number of the shares are already taken, the mode of payment to be as follows:—viz., £2 per share on allotment, and £2 per share on the 25th of March, 1856. Applications for shares to be made either to Captain Puckey, to Mr. W. West, St. Blazey, Cornwall, or to Mr. W. Charles, 27 Austinfairs, London, without delay, as this opportunity will only be kept open for one month. 200 shares only remain unallotted.

Captain Puckey's reports, and also a full report on the present position of the undertaking can be seen at the offices, 27 Austinfairs, London.

Wheal Constance Lead Mining Company.—To Mr. W. Charles.

Sir.—I will take shares in this company, and will pay the deposit of £2 per share at any time when required, and the balance of £2 on the 25th March, 1856.

Dated this day of , 1856. Name in full: Residence:

NEW PATENT ACT, 1852.—Mr. CAMPIN, having advocated

Patent Law Reform before the Government and Legislature, and in the pages of the *Mining Journal*, &c., is now READY TO ADVISE AND ASSIST INVENTORS

IN OBTAINING PATENTS, &c., under the NEW ACT.

The Circular of Information, gratis, on application to the Patent Office and Deeds' Registry, 156, Strand.

NORTH TAMAR CONSOLS SILVER-LEAD MINE, BEERFERRIS, DEVON, WITH THE VALUABLE MACHINERY AND MATERIALS.

MR. JAMES WHITE has received instructions (in pursuance of a resolution passed at a Special General Meeting of the adventurers) to SELL, BY AUCTION, at the Mart, opposite the Bank of England, on Thursday, the 21st of January, 1856, at One o'clock precisely, in One Lot, a valuable mining property, known as the NORTH TAMAR CONSOLS SILVER-LEAD MINE, situate in the parish of Beerferris, in the county of Devon, well proved to be one of the best lead mining districts in the West of England, together with the MACHINERY and MATERIALS thereon, including a NEW 24 in. cylinder STEAM PUMPING ENGINE, capstan, shears, horse-whim, 40 fms. of pitwork, complete, &c.; held from the Earl of Mount-Edgcumbe, at 1-15th dues. The shaft has been sunk 41 fms., and three levels driven north and south; and, with a comparatively small outlay, the mine might be brought into a productive state.

May be viewed, and particulars obtained of Messrs. HANCOCK and SHARP, solicitors, 20, Tokenhouse-yard, London; Mr. W. E. COMMINS, Tavistock; Mr. H. PEET, 20, St. Helen's-place; and at Mr. JAMES WHITE's office, 1, Union-court, Old Broad-street, London.

COLD MINING SETTS FOR SALE IN NORTH WALES.—

230 acres adjoining the DOLFRYNN GOLD MINE, containing upwards of 2 ozs. of gold in the ton of matrix.

200 acres adjoining the VIGRA AND CLOGAU GOLD MINE, containing upwards of 2 ozs. of gold in the ton of matrix.

250 acres adjoining the PRINCE OF WALES GOLD MINE, containing several lodes, carrying from 2 ozs. to 4 ozs. of gold in the ton of matrix.

200 acres north-east of the CAMBRIAN GOLD MINE, containing upwards of 2 ozs. of gold in the ton of matrix.

These valuable properties also contain productive copper and lead lodes, with abundance of water-power.—Apply to J. HARRIS, Dolgellau, Merionethshire.

S KIDDAW AND BLENCATHERA MINES, NEAR KESWICK, CUMBERLAND.—MACHINERY FOR SALE, BY PRIVATE CONTRACT.

consisting of 20 ft. WATER-WHEEL, 3 ft. broad, nearly new, and very substantially built, crank, connecting rods and bob, sole trees, &c.; 12 fms. of 7 1/2 in. pumps; 12 fms. of 1 1/2 in. rods; 12 fms. of ladders, dividing boards, &c.; 1 crushing mill with 1 pair of plain rollers and fittings; tabs, buddies, and washing materials; smiths' tools; quantity of mining tools; horse-whim, kibbles, rope, &c.; crane wheel; bucket doorways; space timber; iron, &c.

The directors are empowered to treat with any respectable party for the transfer of the sett, containing many promising lead and copper lodes, from which about £600 worth of ore has been sold by the present company.

The mines and machinery may be seen on application to Capt. JOS. SPARK, Keswick; and further particulars may be had on applying to Mr. JOS. HEWSON, secretary, Cockermouth, Cumberland.

WHEAL SUSAN, SITHNEY, CORNWALL.—TO BE SOLD, BY PRIVATE CONTRACT, an excellent 20-in. cylinder STEAM-ENGINE, 9 ft. stroke, equal beam, with one boiler about 8 tons, 24 head stamps, two fly-wheels, &c., complete, and in first-rate condition, together with all the woodwork of engine-house and boiler-house, &c.—Application to be made to Mr. FRAS. DANIELL, Camborne; Mr. JOHN BUNNELL, auctioneer, Burncoose, Redruth; or Mr. H. V. NEWTON, auctioneer, printer, &c., Camborne.

TO BE SOLD, the CRAIG-Y-MWYN LEAD MINES, Montgomeryshire, together with all their MACHINERY, RAILS, LEASE, &c., now in work. A large sum of money has been lately expended on these mines; they are now extensively opened, and have cut some valuable veins of ore. To any spirited proprietor, they offer early and profitable returns for a very small additional outlay.—For plans and reports, and to treat, apply to Mr. BELL WILLIAMS, land agent, 16, Castle-street, Liverpool.

TO BE DISPOSED OF, PART or ALL of a large MINING SETT, in a good locality, and in the neighbourhood of rich mines. Dues very easy, and water-power in abundance, if required.—For further particulars and information, address "A. Z.", *Mining Journal* office, 26, Fleet-street, London, where plans and specimens of the ore can be seen.

TO COLLIER OWNERS AND OTHERS.—TO BE SOLD, BY PRIVATE CONTRACT, an excellent CONDENSING ENGINE, cylinder 30 in. diameter, 40-horse power, manufactured by Murray, of Chester-le-street. It is almost new, and in good order, and, from its site being required for improvements in Gateshead, would be sold at a sacrifice.—To be seen by applying to Mr. JOHN LAMB, town surveyor; or Messrs. HAGGIE BROTHERS, rope manufacturers, Gateshead-on-Tyne.

TO CAPITALISTS.—FOR SALE (solely in consequence of the ill-health of the inventor), a valuable PATENT FOR ECONOMISING FUEL partly made out of the fine dust of coal, but very superior to anything of the kind before invented. It is simple in its manufacture, and suitable for domestic and manufacturing purposes. High testimonials of its value can be produced; and it has just commenced working under most favourable auspices. This being genuine, none but principals will be treated with.—Apply to R. R. COX, coal merchant, Farnham.

TO STONE MERCHANTS, CONTRACTORS, AND OTHERS.—WOODLESFORD AND OULTON SANDSTONE QUARRIES, NEAR LEEDS, YORKSHIRE.—A FAVOURABLE OPPORTUNITY now presents itself to STONE MERCHANTS, &c., the GETTING OF STONE in a portion of the above QUARRIES being now TO LET. The stone consists of blocks of large dimensions, for cisterns or troughs, or can be sawn into slabs, &c.; and has been extensively and advantageously worked for about a century. The quarries are situated within a quarter of a mile from the Midland Railway Station, and Aire and Calder Canal Wharf, at Woodlesford, where cranes are erected for the purpose of the trade.—For further particulars, apply to Mr. JON DORSON, Esq. (the owner), solicitor, Leeds.

MANGANESE.—ON SALE, a CONSIDERABLE QUANTITY of MANGANESE, of very good quality, ready for delivery, a portion of which is now lying at the warehouse in Sheffield. It has been assayed by Dr. Bingley, and produced as follows:—

Carbonic acid, moisture, &c., capable of being driven off 13:904

at low red heat 1:20

Silica, alumina, &c., forming gangue 33:516

Peroxide of iron 6:960

Oxide of manganese 45:620=100:000

For further particulars, apply to Mr. GEORGE WILSON, share and mining broker, No. 6, George-street, Sheffield.

IMPORTANT TO IRONMASTERS.—Several portions of the IRONSTONE and IRON ORES on the MULGRAVE ESTATE, near Whitley, belonging to the Marquis of Normanby, are still unlet, and may NOW BE TAKEN advantageously on advantageous terms. This immense seam runs for about five miles along the cliff facing the German Ocean, is from 8 to 15 ft. in thickness, and is allowed to compete with the much the richest ironstone yet discovered in Cleveland. It is within 16 miles (by sea) of Hartlepool, and 20 of Middlesbrough—both the above places now becoming celebrated for the manufacture of iron. The seam will be divided so as to suit companies; and further information may be obtained on application to Mr. KIRK, at Lythe Hall Office, near Whitley; or to Messrs. LEMAN and Co., 51, Lincoln's Inn-fields, London.—Lythe Hall, Dec. 11, 1855.

MINERALS, &c., TO LET.—TO LET, upon long leases, the MINERALS under the Stepney Estate, in the counties of Carmarthen and Glamorgan, South Wales, comprising upwards of 12,000 acres, and containing IRON-STONE, BLACK-BAND, ANTHRACITE, BITUMINOUS, and STEAM COAL, and CULM; LIMESTONE, MARBLE, and FLAG QUARRIES, FIRE-CLAY, and BRICK EARTH; also, desirable SITES for the erection of COPPER and other SMELTING WORKS, TIN-

CORT'S NATIONAL ANNUITY FUND.—The SUBSCRIPTION ACCOUNT is NOW OPEN at the banking-house of Sir John W. Lubbock and Co., Mansion House-street, London, where contributions in aid of this important cause, from public spirited individuals, now so alive to great national duties, will be duly acknowledged; and where a list may be seen of the Committee promoting the appeal.

A COPY of the GENERAL PETITION, in course of signature, to the House of Commons, and full particulars of the extraordinary facts, including a pamphlet kindly furnished by David Murchison, Esq., giving a sketch of the iron trade of this country in the last century; the origin of our export trade in 1785, now reaching more than 1,000,000 tons yearly; the consequent diminution of the export trade of Russia, which event alone has enabled us to maintain our present proud pre-eminence over that power, on whom we were previously in servile dependence for this necessary to the arts, either of peace or war; the treatment in 1789 of the author of these vast benefits by public defaulters and others; the recompence made to his widow and wife by the House of Commons in 1812, for saving up to that time to the British empire more than £30,000,000 sterling; may be had at the *Mining Journal* office, 26, Fleet-street; the *Mechanics' Magazine* office, 166, Fleet-street; or by post on remittance of three postage stamps.—Dec. 29, 1855.

ANTI-EXPLOSIVE BOILERS, BY DUNN, HATTERSLEY, AND CO., WINDSOR BRIDGE IRONWORKS, MANCHESTER.

The more important of the numerous advantages possessed by DUNN'S PATENT DUPLICITY RETORT STEAM BOILERS, are, their EXCEEDING STRENGTH and SIMPLICITY OF CONSTRUCTION, enabling the manufacturers to make them at a LOW PRICE. Being made in parts, all of which are duplicates, any portion can be readily replaced at any time, or the whole may be enlarged with the utmost facility, by placing more cylinders side by side, joining the whole into a continuous corrugated flat-bottomed boiler.

This important point in their construction entirely OBLIVIATES the DANGER of EXPLOSION (from being tended by unskilled men), as damage done to one portion cannot affect the others, or disarrange the whole.

Every part is SEVERELY TESTED before leaving the manufactory, and warranted.

These boilers are ECONOMICAL in use, their large heating surface giving the greatest effect with the smallest amount of fuel. Their roomy furnaces admit of the consumption of the cheaper and more bulky kinds of fuel, such as brushwood, sawdust, small coal, peat, refuse of resin, pitch, grass, cane refuse, &c. They are adapted to any kind of smoke burners, and their clear circulation of water prevents scaling or clogging with dirt.

By a slight difference in the arrangement of the parts, they can be made SUITABLE for LAND, MARINE, or LOCOMOTIVE ENGINES; for use in sugar refining, tallow rendering, extracting palm, fish, and other oils, or the saccharine matter from the roots, &c., and every other use to which boilers are applied.

Being, as before stated, manufactured in parts, each of which will not exceed in weight 2 cwt., to 3 cwt. (as the case may require), they possess great facilities for transport by water or land, particularly in the interior of mountainous districts, where roads have not been established.

These boilers have been well tested in the manufacturing and mining districts of England, and have been most highly approved for both home and foreign use by the most eminent engineers. LICENSEES are GRANTED to manufacture these boilers.

For prices, further particulars, or any information, apply to the patentees, Messrs. Dunn and Co., Windsor Bridge Ironworks, near Manchester.

HORIZONTAL ENGINES, from 8 to 70-horse power; and TURN-TABLES, from 10 ft. to 40 ft. diameter; always in a forward state of manufacture, to ensure quick deliveries. Every description of RAILWAY PLANT supplied at the shortest notice.

ENGINEERS.—NORTH WOOLWICH ELASTIC STEAM PACKING (CANVAS AND INDIA RUBBER), at 1s. 4d. per lb.

S. W. SILVER, AND CO., INDIA RUBBER WORKS, NORTH WOOLWICH (opposite Her Majesty's Dockyards), having considerably extended their manufacture, in order to meet the daily increasing demand upon them for this effective and durable article, are enabled to offer the very best material at the reduced price of 1s. 4d. per lb.

Testimonials may be seen at S. W. Silver and Co.'s warehouses, Nos. 3 and 4, Bishopsgate-street (opposite London Tavern), where orders for Steam Packing, also Buffer Springs, Pump Clacks, and the various India Rubber appliances, will meet with prompt attention.

CAUTION.—S. W. Silver and Co. have found it necessary to stamp all their manufacture thus.—"S. W. Silver and Co., Works, North Woolwich."

PATENT IMPROVED WIRE ROPE WORKS, MILLWALL, POPLAR.—A. J. HUTCHINGS, AND CO., Sole Makers to the Lords of the Admiralty.—ROUND and FLAT ROPES, of every description, suitable for mining operations or other purposes, GALVANIZED or UNGALVANIZED, MANUFACTURED upon an IMPROVED PRINCIPLE, ensuring great pliancy and durability. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.

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Showing the position and prospects of nearly 250 mines.

By JOSEPH YELLOL WATSON, F.G.S.

We commend this review to the careful perusal of our readers.—*Mining Journal*.

Effingham Wilson, publisher, 11, Royal Exchange; also, *Mining Journal* office, 26, Fleet-street, London.

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This journal is not in any way connected with a similar weekly publication. Its distinctive and exclusive features are, that it brings down the patent and all other intelligence to the day of publication (Saturday), and gives a full summary of the news of the week. The number of this day (Jan. 19) contains: Tonnes Registration, by Charles Atherton, Esq.; Canal Traction; Steam Tug; Inter-Oceanic Ship Canals; Premiums by the Institute of Civil Engineers; Wrought-Iron and Steel on the Making of Ordnance; On Boiler Explosions, by Matthias Dunn, Esq.; Government Mine Inspection; Clifford's Plan of Lowering Ships' Boats; Our Iron Manufactures; The Crystal Palace; The Conditions of Passage; The President's Message; The Rueyge Poisoning Case; The Murder in Bedford-row; with a full Summary of the News of the Week; Reviews; Notices; The Markets; Lists of Bankrupts, &c.; The Patent and all other intelligence brought down to the hour of publication.

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| <i>Shares.</i> | <i>Mines.</i> | <i>Paid.</i> | <i>Last Price.</i> | <i>Percent.</i> | <i>Dividends per Share.</i> | <i>Last Paid.</i> |
|----------------|--|--------------|--------------------|-----------------|-----------------------------|---------------------|
| 5120 | Alfred Consols (copper), Phillack* | £11s.10d. | 16½ | 13½ 16 | £13 18 0 | £0 5 0—Dec., 1855. |
| 1624 | Baldswell (tin), St. Just | 11½ | 5 | — | 12 3 0 | 0 5—Jan., 1854. |
| 4003 | Boulford United (copper), Tavistock | 2s.6s. 9d. | 10½ | 9½ | 8 0 0 | 0 5—Nov., 1855. |
| 5000 | Black Craig (lead), Kirkcudbrightshire | 5 | 5 | — | 0 5 0 | 2 6—July, 1853. |
| 210 | Botallack (tin, copper), St. Just* | 91½ | 240 | 250 | 336 5 0 | 5 0—Dec., 1855. |
| 1930 | Carn Brea (copper, tin), Illogan | 15 | 65 | — | 231 10 0 | 3 0—Dec., 1855. |
| 2445 | Carnyorth (tin), St. Just | 3 | 4½ | 4½ | 0 9 0 | 0 3—Dec., 1855. |
| 10000 | Castle State Quarry, Dolwyddan | 1 | 1½ | — | 0 2 0 | 0 4—Feb., 1855. |
| 200 | Cefn Cwm Brynni (lead), Cardiganshire | 33 | 95 | 88 | 3 0 0 | 3 0—Sept., 1855. |
| 235 | Comford (copper), Gwennap, Cornwall | 78 | 9 | 9 | 9 0 0 | 3 0—June, 1855. |
| 256 | Conduor (copper, tin), Camborne* | 20 | 135 | 120 130 | 62 0 0 | 2 2—Jan., 1856. |
| 121 | Cwmystwyth (lead), Cardiganshire | 60 | 120 | — | 55 0 0 | 5 0—Nov., 1855. |
| 1024 | Devon Great Consols (copper), Tavistock* | 1 | 405 | 400 410 | 470 0 0 | 10 0—Nov., 1855. |
| 2030 | Dhuoro (copper), Ireland | 1 | 4 | — | 0 3 0 | 0 1 8—Nov., 1855. |
| 179 | Dolgoath (copper, tin), Camborne* | 257 3½ | 100 | 95 | 879 4 0 | 3 0—Dec., 1855. |
| 2300 | Drake Wall (tin, copper), Calstock | 17. 9s. | 36 | — | 0 6 6 | 0 1 6—April, 1853. |
| 800 | East Darren (lead), Cardiganshire | 32 | 85 | — | 8 0 0 | 4 0—Nov., 1854. |
| 128 | East Pool (tin, copper), Pool, Illogan* | 24½ | 160 | — | 248 0 0 | 2 10 0—Dec., 1855. |
| 1024 | East Wheal Margaret (tin, copper) | 5½ | 15 | 13½ | 0 5 0 | 0 5 0—Feb., 1854. |
| 1400 | Eyam Mining Company, Derbyshire | 3½ | 28½ | — | 6 3 4 | 0 10 0—Dec., 1855. |
| 494 | Fowey Consols (copper), Tywardreath | 40 | 30 | — | 401 13 0 | 2 0 0—Oct., 1855. |
| 2244 | Foxdale, Isle of Man | 71. 10s. 6d. | 30 | — | 46 7 3 | 1 0 0—Dec., 1855. |
| 220 | Ditto (New Shares of 25d. each) | 25 | 30 | — | 7 4 0 | 1 0 0—Dec., 1855. |
| 4448 | General Mining Co. for Ireland (cop, lead) | 3 | 2½ | 2 | 1 0 8 | 0 3 3—June, 1855. |
| 2009 | Goginan (lead), Cardiganshire, Wales | 8 | 6 | — | 22 0 0 | 5 0—Sept., 1852. |
| 1021 | Gonanore (copper), St. Cleer | 13½ | 26 | 22 24 | 0 7 6 | 7 6—Oct., 1853. |
| 20000 | Great Cratia (copper), St. Austell | 1 | — | — | 0 1 0 | 1 0—Sept., 1854. |
| 11750 | Great Fulgoon (tin), St. Austell | 4½ | 2½ | 2 | 0 10 0 | 0 4 3—Oct., 1852. |
| 6000 | Great South Tonga | 2½ | 6 | — | 0 2 6 | 0 2 6—June, 1855. |
| 26666 | Great Wheel Vor (tin, copper), Helston | 5 | 4½ | 4 | 0 5 0 | 0 5 0—June, 1855. |
| 119 | Great Work (tin), Germoe | 100 | 130 | — | 181 10 0 | 5 0—Nov., 1854. |
| 1024 | Herdsfoot (lead), near Liskeard | 8½ | — | — | 2 12 6 | 7 6—April, 1854. |
| 6000 | Hington Down Consols (copper), Calstock | 3½ | 7½ | 7 7½ | 2 1 0 | 0 2 6—Nov., 1855. |
| 2000 | Holyford (copper), near Tipperary | 11 | 7½ | — | 3 7 6 | 2 0 6—Nov., 1855. |
| 76 | Jamaica (lead), Mold, Flintshire | 31. 13s. 6d. | — | — | 380 0 0 | 5 0 0—March, 1855. |
| 2043 | Keuneggy (copper), Breage | 6s. 7d. | — | — | 0 4 0 | 0 4 0—March, 1855. |
| 756 | Kirkcudbrightshire (lead), Kirkcudbright | 9½ | — | — | 2 6 0 | 0 3 0—Nov., 1855. |
| 20 | Laxey Mining Company, Isle of Man | 100 | 1000 | — | 1320 0 0 | 50 0—Jan., 1856. |
| 160 | Levant (copper, tin), St. Just | 2½ | 120 | — | 1048 0 0 | 2 0 0—Aug., 1855. |
| 400 | Lisourne (lead), Cardiganshire, Wales | 18½ | 150 | — | 223 13 0 | 5 0—June, 1855. |
| 320 | Machno slate and Slab Company | 25 | 29 | — | 2 10 0 | 1 5 0—Dec., 1854. |
| 160 | Ditto (New Shares) | 18½ | 23½ | — | 1 17 6 | 0 15 0—Dec., 1854. |
| 6030 | Marke Valley (copper), Caradon | 41. 10s. 6d. | 4½ | — | 0 5 6 | 0 3 0—Sept., 1855. |
| 5000 | Mendip Hills (lead), Somerset | 3½ | 2 | — | 0 17 6 | 0 7 6—Dec., 1854. |
| 5000 | Merlins (lead), Flint | 21. 18s. | 2½ | 1 | 1 11 0 | 0 2 6—June, 1855. |
| 20000 | Mining Co. of Ireland (copper, lead, coal) | 7 | 13½ | 13 x d | 11 11 0 | 0 14 0—Jan., 1856. |
| 5030 | Nanteos and Penrhiew | 1½ | — | — | 0 1 6 | 0 1 6—April, 1855. |
| 7500 | Nantlle Vale (slate), Llanllynn | 1 | 1½ | — | 0 3 9 | 0 1 3—Nov., 1854. |
| 6400 | Nether Hearth, Westmorland | 2s. | 1½ | — | 0 1 0 | 0 1 0—Oct., 1855. |
| 470 | Newtonards Mining Company, Co. Down | 50 | 50 | — | 44 0 0 | 1 0 0—Oct., 1855. |
| 200 | North Pool (copper, tin), Pool | 22½ | 140 | — | 324 0 0 | 2 0 0—Dec., 1854. |
| 149 | North Roskear (copper), Camborne | 10 | 80 | — | 249 10 0 | 4 0 0—Sept., 1855. |
| 6000 | North West Basset (copper, tin), Illogan* | nil. | 41½ | 40 40½ | 6 16 6 | 0 17 6—Dec., 1855. |
| 6100 | Par Consols (copper), St. Blazey | 1½ | 19½ | 19 19½ | 23 18 0 | 0 12 0—Oct., 1855. |
| 500 | Peak United (lead), North Derbyshire | 7½ | 11 | — | 4 0 0 | 0 10 0—Dec., 1855. |
| 200 | Phoenix (copper, tin), Linkinhorne | 30 | 500 | — | 147 0 0 | 37 0—Nov., 1855. |
| 1050 | Pilberoy (tin), St. Agnes (Preferential) | 15 | — | — | 11 3 10 | 1 4 0—Dec., 1855. |
| 560 | Providence Mines (tin), Uny Lelant | 20. 13s. 2d. | 50 | — | 34 4 6 | 4 0 0—Nov., 1855. |
| 512 | Roswarone United (copper, tin), Gwinear* | 12 | 120 | — | 15 10 0 | 4 0 0—Dec., 1855. |
| 256 | South Caradon (copper), St. Cleer* | 2½ | 300 | — | 388 0 0 | 8 0 0—Nov., 1855. |
| 123 | South Crinials (copper), St. Austell | 19 | 400 | — | 60 0 0 | 20 0—June, 1855. |
| 9000 | South Tamar (silver-lead), Beerfrest | 11. 6s. 6d. | 6½ | — | 3 1 0 | 0 5 0—Jan., 1855. |
| 276 | South Tolqua (copper), Redruth, Cornwall | 18 | 142½ | 140 150 | 69 0 0 | 4 0 0—May, 1853. |
| 496 | South Wheal Frances (copper), Illogan 18s. 13s. 9d. | 38½ | 37½ | — | 150 5 0 | 10 0—Jan., 1856. |
| 1024 | Spearne Consols (tin), St. Just, Cornwall | 1½ | 2 | 2 | 8 8 6 | 0 2 6—Dec., 1853. |
| 280 | Spearne Moon (copper), St. Just | 23. 7s. 8d. | — | — | 3 0 0 | 1 0 0—Dec., 1855. |
| 1024 | St. Aubyn and Grylls (cop, tin), Breage 37. 17s. 8d. | 2½ | — | — | 0 17 6 | 0 7 6—April, 1855. |
| 91 | St. Ives Consols (tin), St. Ives | 80 | 100 | — | 883 0 0 | 8 0 0—Feb., 1854. |
| 9600 | Tamar Consols (silver-lead), Beerfrest | 4½ | 3½ | — | 4 11 0 | 2 0 0—Feb., 1853. |
| 6000 | Tinctor (copper, tin), near Pool, Illogan | 9 | 4½ | 4½ 4½ | 6 18 6 | 0 10 6—Feb., 1853. |
| 2048 | Trehane (silver-lead), Menheniot | 3½ | 4½ | 4½ 3 | 8 11 3 | 0 5 0—Dec., 1855. |
| 572 | Trelony Consols (tin), St. Ives | 11½ | 25 | — | 1 15 0 | 1 0 0—Feb., 1854. |
| 96 | Treaswyan (copper), Gwennap, Cornwall | 22½ | 150 | — | 4677 15 6 | 5 0—June, 1855. |
| 129 | Trehelish (copper), Gwennap, Cornwall | 10½ | 20 | 15 | 462 13 6 | 2 10 0—April, 1854. |
| 30000 | Trevally (slate), Boscastle | 1 | — | — | 0 1 0 | 0 1 0—Feb., 1855. |
| 4096 | Trewetha (silver-lead), Menheniot, Cornwall | 2 | 3½ | 3 | 0 17 0 | 0 4 0—Dec., 1855. |
| 160 | Trumpet Consols (tin), near Helston | 9½ | 90 | — | 55 0 | 5 0 0—Dec., 1854. |
| 400 | United Mines (copper), Gwennap* | 40 | 240 | 240 | 59 5 0 | 3 0 0—Dec., 1855. |
| 20000 | Vale of Towy (lead), Llangunnor, Carmarthenshire | 5½ | 1½ | 1½ 1½ | 0 1 0 | 0 1 0—Oct., 1855. |
| 1024 | Wellington (copper, tin), Perranuthnoe | 8½ | — | — | 2 5 0 | 0 2 0—Jan., 1855. |
| 10500 | Welsh Poiss (silver-lead), Talybont, Card. | 2 | 6 | 4 4½ | 0 15 0 | 0 5 0—Jan., 1855. |
| 2500 | Ditto | 2 | — | 1 | 0 11 0 | 0 7 0—Jan., 1855. |
| 6000 | West Basset (copper), Illogan* | 1½ | 37½ | 37 | 274 5 0 | 0 12 6—Nov., 1853. |
| 256 | West Caradon (copper), Liskeard | 20 | 143 | — | 12 0 0 | 2 0 0—May, 1855. |
| 256 | West Damsel (copper), Gwennap | £10. 7 | 50 | — | 25 5 0 | 0 15 0—Jan., 1856. |
| 1024 | West Providence (tin), St. Erth | 5 | 14½ | 13½ 15 | 22 10 0 | 5 0 0—Dec., 1855. |
| 400 | West Wheal Seton (copper), Camborne* | 38½ | 346 | — | 6 10 0 | 0 10 0—Dec., 1855. |
| 1228 | Wheat Arthur (copper), Calstock | 7 | 6½ | — | 1 0 0 | 1 0 0—Aug., 1855. |
| 240 | Wheat Bai (tin), St. Just | 6½ | — | — | 370 6 0 | 12 10 0—Dec., 1855. |
| 512 | Wheat Bassett (copper), Illogan* | 5½ | 402½ | 400 | 5 0 0 | 2 0 0—Jan., 1856. |
| 256 | Wheat Buller (copper), Redruth* | 5 | 615 | 600 | 731 5 0 | 20 0—Jan., 1856. |
| 1024 | Wheat Charlotte, Perranuthnoe* | 3½ | 6 | 6 | 1 10 0 | 0 10 0—Sept., 1852. |
| 250 | Wheat Clifford (copper), Gwennap | — | 500 | — | 9 1 3 | 2 14 4—Aug., 1854. |
| 5700 | Wheat Exmouth and Adams United | 41. 14s. | 8 | — | 1 7 0 | 2 0 6—Oct., 1855. |
| 5000 | Wheat Fortescue, Bodmin | nil. | 1½ | 2 | 2875 10 0 | 8 0 0—May, 1854. |
| 125 | Wheat Friendship (copper), Devon | — | 110 | — | 4 10 0 | 1 0 0—Oct., 1853. |
| 512 | Wheat Jane (silver-lead), Kew | 3½ | 8 | — | 1 0 0 | 0 10 0—Dec., 1853. |
| 1024 | Wheat Kitty (tin), Uny Lelant | £11. 7 2 | 11 | 9½ 10½ | 30 0 0 | 2 0 0—Aug., 1854. |
| 430 | Wheat Lovel (tin), Wenvron | 33 | 30 | — | 20 0 0 | 7 0 0—Nov., 1853. |
| 112 | Wheat Margaret (tin), Uny Lelant | 79 | 150 | — | 237 0 0 | 2 2 6—Oct., 1853. |
| 1024 | Wheat Mary Ann (lead), Menheniot | 3½ | — | 16½ | 16 2 0 | 0 15 0—Dec., 1853. |
| 500 | Wheat Owles, St. Just, Cornwall | 70 | 280 | — | 176 3 0 | 2 10 0—Nov., 1855. |
| 240 | Wheat Reeth (tin), Uny Lelant | 24½ | 17½ | 200 205 | 49 10 0 | 4 0 0—Sept., 1852. |
| 195 | Wheat Seton (tin, copper), Camborne* | 107 | 210 | — | 261 10 0 | 1 0 0—Dec., 1855. |
| 520 | Wheat Trelawny (silver-lead), Liskeard | 8½ | 27½ | — | 49 0 0 | 1 0 0—Oct., 1855. |
| 1024 | Wheat Treymaine (tin, copper), Gwinear | 9½ | 3½ | — | 10 2 6 | 0 7 0—Jan., 1854. |
| 4995 | Wheat Wrey (lead), St. Ives | 11. 9½ | 10 | 10 | 0 16 0 | 0 4 0—Nov., 1855. |
| 2009 | Wicklow (copper), Wicklow | 5 | 27 | — | 24 13 0 | 1 12 0—July, 1854. |

[* Dividends paid every two months. + Dividends paid every three months.]

FOREIGN MINES

| | | | | | | | | | | |
|--------|---|--------------|------|------|------|--------|------|-----|-------------|--------------|
| 5000 | Aiten Mining Company (copper), Norway | ... £14 12 | 3 | 2 | 2 2½ | 4 | 5 0 | 0 | 15 0 | —Nov., 1853 |
| 51605 | Baden, Grand Duchy of | 1 | 1 | 1 | 1 | 0 | 1 0 | 0 | 1 0 | —Nov., 1853 |
| 101000 | Brazilian Imperial (gold), Brazil | 28 | 2 1½ | 1 1½ | 2 1½ | 54 | 17 6 | 0 | 10 0 | —Dec., 1844 |
| 2424 | Burra Burra (copper), South Australia | 5 | 140 | — | — | 155 | 0 0 | 5 | 0 0 | —March, 1853 |
| 12000 | Cobre Copper Company (copper), Cuba | 40 | 69 | 67 | 71 | 73 | 12 0 | 4 | 0 0 | —July, 1853 |
| 09000 | Colonial Gold, Australia | 1 | 5 | 5 | 5 | 0 | 1 6 | 0 | 1 6 | —March, 1853 |
| 16000 | Copiapo Mining Company (copper), Chile | 16 | 20 | 19 | 21 | 4 | 15 0 | 1 | 0 0 | —March, 1853 |
| 26000 | General Min. Assoc. (iron, coal), Nova Scotia | 20 | 16 | 14 | 16 | 9 | 0 0 | 0 | 10 0 | —June, 1853 |
| 16000 | Linares (lead), Pozo Ancho, Spain | 3 | 7 1½ | 6 1½ | 7 1½ | 3 | 0 6 | 0 | 10 0 | —Sept., 1853 |
| 100000 | Lusitanian (of Portugal) | 1 ½ | 2 | 1 ½ | 2 | 0 | 2 6 | 0 | 2 6 | —Sept., 1853 |
| 13815 | Mariguilla and New Granada | 1 | 5 | 5 | 5 | 0 | 2 0 | 0 | 1 0 | —July, 1853 |
| 36500 | Ohermohr (lead), Nassau | 1 | 3 | 3 | 3 | 0 | 1 0 | 0 | 1 0 | —June, 1853 |
| 25000 | Peninsular Mining Company | 2 | — | — | — | 0 | 2 6 | 0 | 2 6 | —Sept., 1853 |
| 10000 | Pontaubaud (silver-lead), France | 20 | 14 | 14 | 14 | 1 | 0 0 | 1 | 0 0 | —June, 1853 |
| - 7000 | Royal Santiago (copper), Cuba | 12 ½ | 4 ½ | 4 | 4 ½ | 33 | 0 0 | 1 | 5 0 | —July, 1848 |
| 104000 | San Fernando (silver-lead), Linares | 1 | 1 | 1 | 1 | 0 | 1 9 | 0 | 0 7 | —June, 1853 |
| 110000 | St. John del Rey (gold), Brazil | 15 | 29 | 27 | 29 | 31 | 17 6 | 2 | 0 0 | —Nov., 1853 |
| 43174 | United Mexican (silver), Mexico | ... AV. 28 ½ | 4 ½ | 4 | 4 ½ | 1 16 6 | 0 | 4 0 | —Feb., 1853 | |
| 76000 | Waller (gold), Goehland Co., Virginia | 1 | 5 | 5 | 5 | 0 | 0 9 | 0 | 0 9 | —July, 1853 |
| 36000 | Mexican and South American Smelting Co. | 9 | 5 ½ | 5 ½ | 6 | 6 | 15 0 | 0 | 7 6 | —Dec., 1853 |
| 158676 | North British Australasian | 1 | 2 | 2 | 2 | 0 | 1 8 | 0 | 1 0 | —April, 1853 |

1990 (1990-1991), Spain 111-112

| <i>Shares.</i> | <i>Paid.</i> | <i>Last Price.</i> | <i>Present.</i> | <i>Shares.</i> | <i>Paid.</i> | <i>Last Price.</i> | <i>Present.</i> |
|--|--------------|--------------------|-----------------|---|--------------|--------------------|-----------------|
| 1000 Cwm Efran (lead), Cardigansh. | 8 | 2 | ... | 12000 Ferran Wheal George | 4 | 4 | ... |
| 3000 Dairhiew (cop., lead), Brecon. | 2½ | — | ... | 2000 Folgear & Lancarrow (cop., tin) | 2½ | 3 | ... |
| 1000 Darren (sil.-lead) Cardigansh. | 6 | 7 | ... | 2400 Queen's United (tin), Wendron | 9 | 5 | ... |
| 1400 Derwent (sil.-lead), Durham | 60 | — | ... | 4999 Queen of Dart, Devonshire | 5½ | 3½ | ... |
| 1024 Devon & Cornwall United (cop.) | 13½ | 20 | ... | 10000 Llanciol United Mine | £1 5 6 | 18 | ... |
| 3907 Devon and Courtney (cop.) | 2 | 4 | ... | 2500 Llancwysol & Bachcludion (lead) | 11 1½ | 12½ | ... |
| 4000 Devon Burras Burrea (copper) | 4½ | 3 | ... | 10000 Kinsey United | 1 | — | ... |
| 10000 Devon Tin Mines, Dartmoor | 1½ | — | ... | 23000 Borrington (lead), Smallbeach | 3 | 1½ | ... |
| 4566 Devon Wheal Bular | £1 4 | 3½ | ... | 1024 Rosewarne and Herland United | 2 | 4½ | ... |
| 1244 Duke of Cornwall, Lostwithiel | £13 2 | 1½ | ... | 5000 Round Hill (sil.-lead), Salop | 13 | 1½ | ... |
| 10000 Dumeley Wheal Phoenix | 1 | 2 | ... | 3250 Silver Brook, Ashburton | 1½ | 3 | ... |
| 3000 Dwyfawn (lead), Wales | £11 11 6 | 10½ | 11½ | 10000 Sithney Wheal Bular (tin) | 3 | 5 | ... |
| 258 Eaglebrook, Llanrhystud, Card. | 40 | 12 | 13½ 14½ | 1500 Skiddaw & Blealettera, Keswick 11½ | — | — | ... |
| 236 East Alfred Consols | £1 1 6 | — | ... | 12000 Sortridge Consols, Whitechurch | 6 | 4½ | 4½ 4½ |
| 236 East Bassett (copper), Redruth | 39 | 47½ | 47½ | 12000 Sortridge and Bedford, Tavistock | 94 104 | — | ... |
| 5000 East Black Craig, Kirkcudbright | 9 | — | ... | 6000 South Bog (lead), Salop | 17½ 7½ | 3½ | ... |
| 1014 East Buller (copper), Redruth. | 12 | 6½ | 7 | 6000 South Carr Brea (cop.), Illogan | 13½ | 12 | ... |
| 2044 East Cefn Brynwo | ½ | — | ... | 5000 South Creven (copper) | £1 6 | 2½ | ... |
| 1024 East Garras (lead), St. Clement Is. 6d. | 14 | 5 | ... | 256 South Garras, St. Clement | 13 | — | 125 |
| 512 East Goldscope (copper) | 1 | 7 | ... | 1024 St. Providence (tin), Sithney | £3 7 | 7 | ... |
| 4000 East Gunnis Lake (copper) | 2½ | 4½ | 5 5½ | 2048 South Wales Consols | £3 8 4 | 3 | ... |
| 9000 East Tamar (sil.-ld.), Beaferris | £2 8 6 | 6 | — | 1105 Sou. Wh. Crofty (cop.), Illogan | £18 10 10 | 5½ | ... |
| 236 East Tolgus (copper), Redruth | 23 | 32½ | 31½ 32 | 5208 St. Aunell Consols | 2½ | 1 | ... |
| 2048 East Wheal George, Walkhampt. | 31 | — | ... | 20000 St. Day United (tin & copper) | 2 | 1½ | 12½ |
| 1035 East Wheal Rose (sil.-lead) | 27½ | 65 | 72 74 | 20000 St. Dennis Consols | 16½ 6½ | — | ... |
| 4000 East Wheal Russell, Tavistock | £1 3 0 | 1 | — | 10000 St. Hilary Wheal Friendship | 1½ | — | 2 3½ |
| 3088 East Wheal Vor (tin) | 2½ | — | ... | 1800 Swanpool, Budock | 8 | — | 1½ |
| 5000 Fe Donald (lead, antimony) | 58. 6d. | 1½ | — | 10000 Taliesin (sil.-lead), Cardigansh. | 2½ | — | ... |
| 24000 Fox Tor (tin), Altarnun | 1 | — | ... | 20000 Tassan (lead), Ireland | — | 1½ | ... |
| 15000 Frog-Isa and Craigroig (lead) | 1 | — | ... | 4944 Tavy Con. (cop.), near Tavistock | £2 14 | — | ... |
| 12000 Galt-Frith-Rhodyn (lead) | 3 | 2½ | — | 6000 Thomas' United, Cardigansh. | 2½ | — | ... |
| 5000 Garreg (lead), Flint | £2 8 6 | — | ... | 6400 Tice. Side (lead), Cumberland | 1½ | — | ... |
| 4000 Gawton United (cop.), Tavistock | £2 12 | 2 | 1½ | 1024 Trebarwyan, Perranuthnoe | 4 | 1½ | ... |
| 1024 Gilmar (tin), St. Erth | 6½ | 11 | 9½ | 25000 Trebregard Consols, St. Teath | 1 | — | ... |
| 12000 Gorn (lead), Llanidloes | 12½ | — | ... | 600 Trebregard (lead), St. Teath | 6½ | — | ... |
| 243 Grambler & St. Aubyn (copper) [103½] | 100 | — | 115 | 5000 Treleigh Cons. (cop.), Redruth | 6 | 1½ | ... |
| 9000 Great Bear (tin), St. Aunell | 20 | 9 | — | 10000 Treliogian, St. Colomb Minor | 1½ | 2 | — |
| 4000 Great Cowarch, Merioneth | 4½ | 1 | — | 5000 Treloewth (copper), St. Erth | £1 19 | 2½ | ... |
| 6000 Great Dowgas | 2 | — | ... | 20000 Treworn Consols, Perranuthnoe | £26 14 | 3 | 1½ |
| 30000 Great Hewas United | £1 8 6 | ½ | — | 4000 Treitol (copper), Bodmin | 6 | 3½ | ... |
| 15161 Great Onslow Cons., Carmeloff | 2½ | — | ... | 2048 Trevallyn (tin, copper) | 6 | 3½ | 4½ |
| 1024 Gt. Sheba Con., Stoke Climsland | 2½ | 11 | — | 1014 Trevemyn (tin), Wendron | 12 | 3½ | ... |
| 10000 Gt. Tregunn Cons., Altarnun | 1 | — | 10 10½ | 16 Trinity (copper, lead) | 220 | 220 | — |
| 10000 Great Treddedor | 2 | 2½ | — | 3200 Ty-Maen, Whifford | — | — | ... |
| 1024 Great Wheal Alfred, Phillock | 35½ | 11½ | — | 6400 Ty-Helid (silver-lead, copper) | — | — | ... |
| 5120 Great Wheal Badlern (tin) | 23 3 | — | — | 6400 Ty-Worglouid (slate), Carnar. | 5 | 5 | — |
| 1024 Great Wheal Fortune, Breage | £18 18 6 | 10½ | — | 10000 Tyw-y-berth (slate), Talylyn | 1½ | — | ... |
| 16000 Grey Mare (iron, &c.), Cornwall | 24. 9½ | — | ... | 5000 Ulpha United Mines, Cumber. | — | — | ... |
| 96000 Gwydir Park Consols, Llanwrtyd | 7½ | — | ... | 6000 Union (tin), Roche & Luxilon | £1 7 | — | ... |
| 512 Halamaning and Croft Gothic 96 | 20 | — | — | 512½ United Mines, Tavistock | 26 4 | 2½ | — |
| 8192 Hawkmoor (tin & cop.), Calstock | £1 0 6 | ½ | — | 2500 Welsh Potosi (new shaves) | 1 | — | 2 2½ |
| 512 Helvellyn Consols (cop.) | 1 | 13 | — | 25000 West Aberffydd, Cardigansh. | 42 | 55½ | — |
| 4096 Hemerlown Consols | £1 5 6 | 5½ | — | 1024 West Alfred (cop.), Phillack | £27 2 | 26 | 22 24 |
| 10000 Herward United (lead), Flint | 30 | — | — | 1228½ West Collacombe (copper) | — | — | ... |
| 10000 Hill Bridge Consols | 1 | 2 | — | 3000 West Cinnis, St. Aslaw | 3½ | 3½ | — |
| 10000 Holmibus (lead, cop.), Callington | 25 | 7 | — | 6400 West Fowey Con. (tin, cop.) | £6 0 8 | 4½ | 4½ 5 |
| 13000 Ivybridge (silver-lead) | 1 | — | 1½ | 25000 West Far Con. (cop.), St. Blaize | 1 | — | — |
| 2648 Kea Trecunayne (tin) | — | — | — | 6000 West Poldern, St. Aslaw | 1½ | 4½ | 4½ 5 |
| 6000 Keswick (lead, Portinscale) | £2 6 6 | 1½ | 1½ | 5500 West Rosewarne United | — | 2 | — |
| 3300 Kilbricken (silver-lead), Clare | 5½ | — | — | 12000 West Sorthide, Whitechurch | 45 60 | — | — |
| 6000 Lady Bertha (copper) | 1½ | 1½ | 1½ 1½ | 1056 West Strat Park, Camborne | 2 | 6½ | 8 9 |
| 1698 Lambarrow Wheal Maria (cop.) | 18 | — | — | 512 West Wheal Frances, Illogan | 23 | 35 | 80 |
| 1024 Leeds and St. Aubyn (tin, cop.) | £2 6 | 4½ | — | 10000 West Wheal Jane, Kew | 1½ | — | — |
| 10245 Leeds Town (tin, cop.), Crownan | 25 | — | 6 | 5000 West Wheal Towan (cop., tin) | 36 | 3 | — |
| 1024 Lelant Consols (tin) | — | — | 6 | 10000 Wheat Agar (copper), Illogan | ½ | — | — |
| 5000 Lewis (tin, cop.), St. Erth | £4 18 | 2½ | — | 12000 Wheat Alfred (cop.), Hayle | 1 | — | 1½ |
| 4000 Loveden United, Cardigansh. | 1½ | 1 | — | 256 Wheat Betony (tin), St. Agnes | 14½ | — | — |
| 20000 Ludgvan Lease (tin), St. Ives | — | — | — | 53½ Wheat Carne (tin), St. Just | 9½ | — | — |
| 1024 Ludgvan Wheal Margaret (tin) | 1 | 2 | — | 4096 Wheat Crebor (cop.), Tavistock | 3½ | — | — |
| 5056 Lydford Consols (lead), Devon | £2 3 6 | ½ | — | 1024 Wheat Cupid (copper), Redruth | 10½ | 13 | — |
| 2500 Madron United (tin), Cornwall | 5 | 2½ | — | 4096 Wheat Edward (cop.), Calstock | 2 | 3½ | 4 4½ |
| 256 Messer (copper), Bodmin | 7½ | 2 | — | 1070 Wheat Eyes (lead), St. Erme | £10 15 9 | 16 | — |
| 6400 Michell (lead), Flint | — | — | — | 720 Wheat Franco, near Tavistock | 20½ | 16 | — |
| 4096 Midleton (lead), Smalswell | 4½ | — | — | 50000 Wheat Guskus (tin, copper) | £22 9 | — | — |
| 1024 Mill Pool (tin, cop.), St. Hilary | 9½ | 5½ | — | 512½ Wheat Harriett, Camborne | — | — | — |
| 7500 Mixon Great Cons. (cop.), Leek | £11 19 2 | 1 | — | 3000 Wheat Helen (tin), Breage | 1½ | 1 | — |
| 10000 Molland (cop.), South Mouton | ½ | 18. 6d. | 18. 3d. | 10000 Wheat Herald, Crownan | 98 6½ | 5½ | 5½ 6 |
| 4096 Mount Tuck (tin, cop.), Lelant | 1 | 5 | — | 50000 Wheat Kitty (tin), St. Agnes | 4½ | — | — |
| 7500 Nant Vale (new shares) | — | — | — | 60000 Wheat Langford (cop., sil.-ld.), Cal. | £1 6 6 | — | — |
| 1700 Nant-y-Car (cop., nr. Rhayader) | — | — | — | 512½ Wheat Margery (tin), St. Ives | 6½ | — | — |
| 1024 North Buller (copper), Redruth | £10 14 | 7½ | 6½ 6½ | 512½ Wheat Mary Ann (Perran) | — | — | — |
| 1024 North Ding Dong (tin), Madron | 1 | — | — | 34000 Wheat Great Consols (cop.) | 6½ | — | — |
| 2000 North Downs (copper), Redruth | 1½ | 1½ | — | 50000 Wheat Marshall, St. Stephens | 1½ | — | — |
| 2500 North Frances (cop.), Illogan | 4½ | 9½ | 10½ 11 | 40000 Wheat Maudlin (lead), Llanverry | 2 | — | — |
| 2000 North Levant (tin), St. Just | 5½ | 7 | — | 512½ Wheat Montague (tin) | — | — | — |
| 1024 North Rosewarne, Gwincar | ½ | — | — | 256 Wheat Morgan, Llantwit | 5 | — | — |
| 14000 North St. Ffowys Consols | 1 | 1 | — | 128½ Wheat Palmar, St. Austell | 27½ | 50 | — |
| 4096 North Tamar (sil.-lead), Lelant | 1 | — | — | 10000 Wheat Regent (Limited) | — | — | 1 1½ |
| 10000 North Towy and Cystangog | 4½ 6d. | — | — | 2048 Wheat Robins (tin), Liskeard | 3 | — | — |
| 1128 North Wheal Crofty (cop.) | £1 18 10 | 11 | 11 11½ | 40000 Wheat Russell (cop.), Tavistock | 2½ | 1 | — |
| 1024 No. Wh. Gilbert (cop.), St. Erth | 1½ | 3 | 2½ | 1024 Wheat Sidney, Plympton | 7 | — | — |
| 1024 N. Wh. Russell, Sampford Spiney | £13 5 0 | 36½ | 36½ | 60000 Wheat Tehidy (copper), Illogan | 2½ | — | 1½ 1½ |
| 4200 North Wheal Trelawny | 2½ | 1½ | — | 512½ Wheat Trefusid (cop.), Gwennap | 20½ | — | — |
| 12000 N. Wh. Unity (cop., tin), Gwin. 1 | 1½ | — | — | 1044 Wheat Trenwith (copper, tin) | £8 9 6 | 10 | — |
| 293 Okel Tor (lead), Calstock | £1 6 | 6½ | — | 30000 Wheat Trevella (tin), Breage | 5 | — | — |
| 10000 Old Trewether Consols | 1 | — | — | 8448 Wheat Trewene (silver-lead) | — | — | — |
| 256 Old Wheal Basset, Illogan | 4 | 2 | — | 30000 Wheat Triestrem, St. Austell | 4½ | — | — |
| 4000 Oola (sil.-lead, cop.), Limerick | ½ | — | — | 3162 Wheat Unity (cop., tin), Gwin. 1 | 4½ | — | — |
| 2500 Orseid (lead), Flint | 2½ | — | — | 1024 Wheat Uny (tin, cop.), Redruth | 22½ | 2 | — |
| 10000 Paul's Downs (copper) | 8 | 4 | — | 1024 Wheat Venton (sil.-lead), Liskeard | £26 13 | 3½ | — |
| 10000 Pedn-an-drean United (tin) | 1½ | — | 1½ 2½ | 30000 Wheat Virtue, Perranarworthal | 3½ | — | — |
| 4335 Pembroke, East Crinnis (cop.) | £1 3 6 | ½ | — | 4096 Wh. Zion (cop., lead), Calstock | £24 5 6 | — | — |
| 5000 Pencore Consols, St. Endor | 1½ | 13 | — | 6400 Whitford (lead), Flint | — | — | — |
| 5000 Pendavon & St. Aubyn (tin, cop.) | ½ | — | — | 4096 Wood (lead), Beaferris | £13 6 | — | — |
| 6000 Pennance Consols | 1½ | — | — | 10000 Wryssan (slate), Festiniog | 1 | — | — |
| 6400 Pen-y-Geili (lead), Flintshire | 6 | 1 | — | 10000 Wryssan (Preference) | 1 | — | — |
| 24000 Perran and Leisure Union | ½ | — | — | 40000 Eocland Consols (tin, copper) | 4½ | — | 18 |
| 6495 Perran Consols (Perranarworthal) | ½ | — | — | — | — | — | — |
| 1160 Perran St. George (copper, tin) | 21½ | 15 | — | — | — | — | — |

1100 20100 50

| MINES NOT HAVING SOLD ORES. | | | Shares. | | | Shares. | | | |
|-----------------------------|---------------------------|----------|---------|---------------------|-------------------------|---------|-------|---------------------|-----------------------------|
| | Paid. | Price. | | Paid. | Price. | | Paid. | Price. | |
| <i>Shares.</i> | | | 5000 | Frank Mills, Devon. | 2 | 41 | 2100 | South Devon Consols | |
| 6000 | Abbey Cons. (lead).. | 1 | 1 | 24000 | Glenalunia&Carvilleen | ½ | ½ | 6000 | S.Dole&Carron. <i>Con.</i> |
| 10000 | Arundel Copper | 1½ | 18. | 512 | Great Rough Tor. | 37 | 4 | 6000 | Severn (lead, cop.). |
| 6000 | Beaufort Consols | 18. | 18. | 12000 | Great Sorridge | 62. | 18. | 6000 | No. Rob. and Sorridge |
| 250 | Berriow Consols | 26 | 16. | 10000 | Great Wh. Martha. | 1 | ½ | 2500 | South Rosewarne |
| 6000 | Boenioene. | £1 4 | % | 10000 | Havos & Henvich. | 1 | ½ | 240 | South Trelawny. |
| 2048 | Ivy Ton Consols | £1 6 | 9 | 2048 | Ivy Ton Consols | £1 6 | 9 | 3072 | South-West Phoenix |
| 1180 | Bridford Consols | 27 | 1 | 17000 | Kilraine, Donegal. | 38. | ½ | 1000 | South Wheal Lovell's (10d.) |
| 2048 | Carew United. | 2 | 2 | 5983 | Mount's Bay Consols | 2½ | ½ | 4000 | South Zion. |
| 6000 | Castell. | 1 | 1½ | 61 | Nant-ar-Nelle. | 31 | 21 | 1800 | Sign Hope (Dart.). |
| 1230 | Clew Bay, Ireland.. | 1 | 1 | 320 | Next Force, Alston. | 1 | ½ | 4000 | Treslyn Consols |
| 250 | Clawance Mines | 15% | 75 | 3072 | Newton St. Cyres. | 1 | ½ | 236 | West Sharp Tor. |
| 18 | Copper Mountain | 4 | 200 | 100 | North Fowey (co.). | 4½ | ½ | 6000 | West Sharp. |
| 2100 | Cwm Consols (tin).. | 1½ | 5 | 6400 | North Hinstone Cons. | 2½, 3d. | ½ | 6000 | West White Bolton. |
| 6000 | Cwn Eglw. | 1 | 1 | 4069 | North Wrey Consols | ½ | ½ | 12000 | W.H. Bray (copper). |
| 3000 | Devon United. | 1 | ½ | 5000 | Pendene Consols | 2 | 1½ | 512 | W. Clinton (lead). |
| 30000 | Dreyston. | ½ | % | 549 | Penguenac, St. Breock | 1 | ½ | 812 | Wheat Freedom. |
| 2048 | Dan Rowan Cons. | ½ | 2 | 6000 | Perranporth (all-lead). | ½ | ½ | 1536 | Wheat Gill. |
| 6 | E. Beacon. | St. Just | 4 | 2048 | Pontefract, C. Cardigan | 2½ | ½ | 4000 | Wheat Glynn. |
| 6144 | East Consol. (cop.). | 3 | 1½ | 1024 | Polwhele, Tregony. | 6d. | 1 | 6000 | Wheat Greenville. |
| 5500 | East Froncysys (cop.). | 13d. | 6d. | 8000 | Red Dragon, Wales. | 19. | ½ | 4500 | Wheat Ludcott. |
| 6000 | East Trelawny (sil.-ld.). | 1 | ½ | 4000 | Ripon Castle (lead). | 19. | ½ | 1024 | Wheat Penair. |
| 4000 | East Wh. Wrey. | ½ | ½ | 6400 | South Buller and | 1 | ½ | 3900 | Wheat Po. Land. |
| 543 | East, Illogan. | 6 | 6 | 5000 | W. Bunterthal. | 1 | ½ | 4000 | Wheat Surprise. |
| 4000 | East, Illogan. | 6 | 6 | 5000 | W. Bunterthal. | 1 | ½ | 1024 | Wheat Typhus. |

Transactions on the Stock Exchange

| Transactions in the Stock Exchange. | | | | | | | | | |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|------------------------------------|-------|--------------------------|--------------------------|
| MINES. | | Shares. | | Paid. | | Clos. | | Pr. Bus. Done. | |
| Shares. | Paid. | Clos. | Pr. | Bus. | Done. | Shares. | Paid. | Clos. | Pr. Bus. Done. |
| 1000000 Agua Fria | 1 | — | — | — | — | 250000 Commercial of London | 29 | — | 30 $\frac{1}{2}$ \pm 2 |
| 30000 Anglo-Australian Gold | 1 | — | — | — | — | 25000 Eng., Scot., and Aust. Char. | 20 | 16 $\frac{1}{2}$ \pm 1 | 17 $\frac{1}{2}$ |
| 100000 Anglo-Californian | $\frac{1}{2}$ | $\frac{1}{2}$ | $\frac{3}{2}$ | $\frac{3}{2}$ | $\frac{3}{2}$ | 6000 London | 50 | 57 | 59 |
| 20000 Australian | 6 $\frac{1}{2}$ | 5 $\frac{1}{2}$ | 5 $\frac{1}{2}$ | 5 $\frac{1}{2}$ | 5 $\frac{1}{2}$ | 25000 London Char. Bank of Austr. | 20 | 15 $\frac{1}{2}$ \pm 1 | 16 $\frac{1}{2}$ \pm 2 |
| 50000 Ave Maria | 1 | — | — | — | — | 16000 Ditto (New) | 5 | 12 $\frac{1}{2}$ \pm 2 | 13 $\frac{1}{2}$ |
| 80000 Charendon Consols | $\frac{1}{2}$ | — | — | — | — | 90000 London and County | 20 | — | 40 \pm 41 |
| 100000 Colonial Gold | $\frac{1}{2}$ | — | — | — | — | 60000 London Joint Stock | 20 | — | — |
| 150000 Copper Miners Eng. Stock | 34 97 | — | — | — | — | 50000 London and Westminster | 20 | — | 49 $\frac{1}{2}$ |
| 50000 Ditto, Pref., 7 $\frac{1}{2}$ percent | 25 | 23 | 25 | — | — | 20000 New South Wales | 20 | 27 | 39 |
| 50000 Farnham | — | — | — | — | — | 32873 Oriental Bank Corporation | 25 | 38 | 40 \pm 39 |
| 50000 Farnham | — | — | — | — | — | 20000 Provincial of Ireland | 25 | 53 | 55 |

MINES.

| Shares. | Paid. | Clos. Pr. | Bus. Done. | 25000 | Commercial of London | 20 | — | 30 4/4 x 4 |
|---|-------|-----------|------------|-------|------------------------------|----|---------------|---------------|
| 100000 <i>Aqua Fria</i> | 1 | — | — | 25000 | Eng., Scot., and Aust. Char. | 20 | 16 1/4 17 1/4 | |
| 30000 <i>Anglo-Australian Gold</i> | 1 | — | — | 6000 | London | 50 | 57 59 | 57 |
| 160000 <i>Anglo-Californian</i> | 1 1/2 | 14 3/4 | 14 1/2 | 25000 | Lond. Chart. Bank of Austr. | 20 | 15 1/4 16 1/4 | 16 1/4 16 1/2 |
| 26000 <i>Australian</i> | 6 1/2 | 24 3/4 | 24 1/2 | 10000 | Ditto (New) | 5 | 12 1/2 2 1/2 | — |
| 50000 <i>Ave Maria</i> | 1 | — | — | 20000 | London County | 20 | — | 40% 41% |
| 80000 <i>Clarendon Consols</i> | 1 1/2 | — | — | 50000 | London Joint Stock | 10 | — | — |
| 160000 <i>Colonial Gold</i> | 1 1/2 | — | — | 50000 | London and Westminster | 20 | — | 49 1/2 |
| 20000 <i>Copper Miners of England</i> | Stock | 34 97 | 25 | 30000 | New South Wales | 20 | 27 39 | |
| 5000 <i>Ditto, Pref., 1 1/2 per cent.</i> | 25 | 23 | 25 | 32873 | Orbital Bank Corporation | 25 | 38 39 | 38 3/4 39 1/2 |
| 45000 <i>Empire</i> | 1 1/2 | 13 1/2 | 14 1/2 | 30000 | Provincial of Ireland | 25 | 53 49 | |

..... 179 000
..... 1 000
eden 1 000

* In accordance with an announcement to that effect, we have removed the prices from all mines in the above list where alterations have not been forwarded, or the price given confirmed, for a period of one month: we hope by that means to remove one difficulty,—that of purchasers or sellers being deceived by the quotation in the current Journal being represented as the present value, although the price may have varied considerably since it first appeared. We hope, also, to bring the parties concerned into more frequent communication with regard to any alteration in the present position or prospects of their respective adventures; and, we need hardly add, that we shall be happy to fill up all the blanks, on receipt of the quotation at which balances have actually been transacted, communicated by the name and address of our correspondent.